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Water Resources Data for Colorado

Volume 3. Dolores River Basin,
Green River Basin,
and San Juan River Basin

U.S. GEOLOGICAL SURVEY WATER-DATA REPORT CO-78-3

WATER YEAR 1978

Prepared in cooperation with the State of Colorado
and with other agencies

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CALENDAR FOR WATER YEAR 1978

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Water-resources data for Colorado for the 1978 water year consists of records of stage, discharge, and water quality of streams; stage, contents, and water quality of lakes and reservoirs, and water levels and water quality of wells and springs. This report (Volumes 1, 2, and 3) contains discharge records for about 440 gaging stations, stage and contents of 25 lakes and reservoirs, 5 partial-record flow stations, 75 crest-stage partial-record stations, and 250 miscellaneous sites; water quality for 140 gaging stations and 60 miscellaneous sites; and water levels for 55 observation wells. A few pertinent stations in bordering States are also included in this report. The records were collected and computed by the Water Resources Division of the U.S. Geological Survey under the direction of J. F. Blakey, district chief. These data represent that portion of the National Water Data System collected by the U.S. Geological Survey and cooperating State and Federal agencies in Colorado.

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1979

PREFACE

This report was prepared by the U.S. Geological Survey in cooperation with the State of Colorado and other agencies by personnel of the Colorado District of the Water Resources Division under the supervision of J. F. Blakey, District Chief, and Alfred Clebsch, Jr., Regional Hydrologist, Central Region.

This report is one of a series issued State by State under the direction of O. M. Hackett, Acting Chief Hydrologist, and the Assistant Chief Hydrologist for Scientific Publications and Data Management.

Data for Colorado are in three volumes as follows:

Volume 1. Missouri River, Arkansas River, and Rio Grande Basins in Colorado.
Volume 2. Colorado River Basin in Colorado, above the Dolores River, and
Volume 3. Dolores River, Green River, and San Juan River Basins in Colorado.

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WATER RESOURCES DATA FOR COLORADO, 1978

VOLUME 1: MISSOURI RIVER, ARKANSAS RIVER, AND RIO GRANDE BASINS
VOLUME 2: COLORADO RIVER BASIN ABOVE THE DOLORES RIVER
VOLUME 3: DOLORES, GREEN, AND SAN JUAN BASINS

INTRODUCTION

Water resources data for Colorado for the 1978 water year consists of records of stage, discharge, and water quality of streams; stage, contents, and water quality of lakes and reservoirs; and water levels and water quality of wells and springs. This report (Volumes 1, 2, and 3) contains discharge records for about 440 gaging stations, stage and contents of 25 lakes and reservoirs, 5 partial-record flow stations, 75 crest-stage partial-record stations, and 250 miscellaneous sites; water quality for 140 gaging stations and 60 miscellaneous sites; and water levels for 55 observation wells. Locations of lake- and stream-gaging stations and water-quality stations are shown in figure 1, locations of crest-stage partial-record stations are shown in figure 2, and locations of observation wells are shown in figure 3. A few pertinent stations in bordering States are also included in this report. The records were collected and computed by the Water Resources Division of the U.S. Geological Survey under the direction of J. F. Blakey, district chief. These data represent that portion of the National Water Data System collected by the U.S. Geological Survey and cooperating State and Federal agencies in Colorado.

Records of discharge and stage of streams, and contents and stage of lakes and reservoirs are published in a series of U.S. Geological Survey Water-Supply Papers entitled, "Surface-water Supply of the United States." Through September 30, 1960, these Water-Supply Papers were published in an annual series, and then in a 5-year series for 1961-65 and 1966-70. Records of chemical quality, water temperatures, and suspended sediment were published from 1941 to 1970 in an annual Water-Supply Paper series entitled, "Quality of Surface Waters of the United States." Records of ground-water levels were published from 1935 to 1955 in an annual Water-Supply Paper series entitled, "Water Levels and Artesian Pressures in Wells in the United States," and from 1955 to the present time, in a 5-year Water-Supply Paper series entitled, "Ground-Water Levels in the United States."

Beginning with the 1961 water year, streamflow records and related data have been released by the Geological Survey in annual reports on a State-boundary basis. Beginning with the 1964 water year, water-quality records for surface and ground water have been similarly released in separate annual reports. These reports provided for rapid release of preliminary data shortly after the end of the water year. The final data were then released in the Water-Supply Paper series mentioned above. Beginning with the 1975 water year, water data will be released on a State-boundary basis in final form and will not be republished in the Water-Supply Paper series. The 1975 and subsequent water year reports will be in a series which will carry an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this report is identified as "U.S. Geological Survey Water-Data Report CO-78-3." These reports are for sale to the public for a nominal fee from the National Technical Information Service, U.S. Department of Commerce, Springfield, Virginia 22151. For more information on available publications, see the section entitled, "PUBLICATIONS" on subsequent pages.

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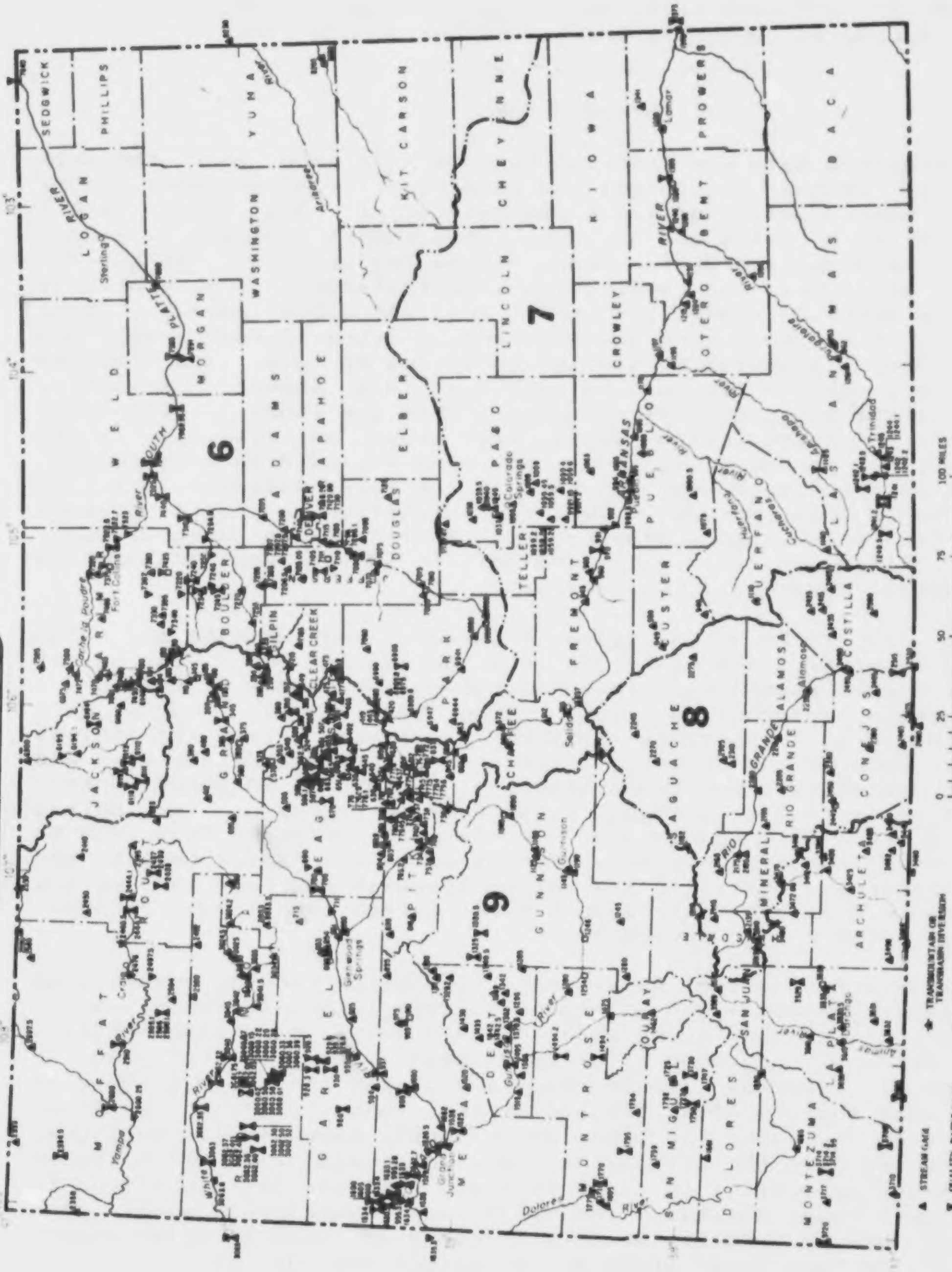

Figure 1.—Map showing locations of lake- and stream-gaging stations and water-quality stations in Colorado.

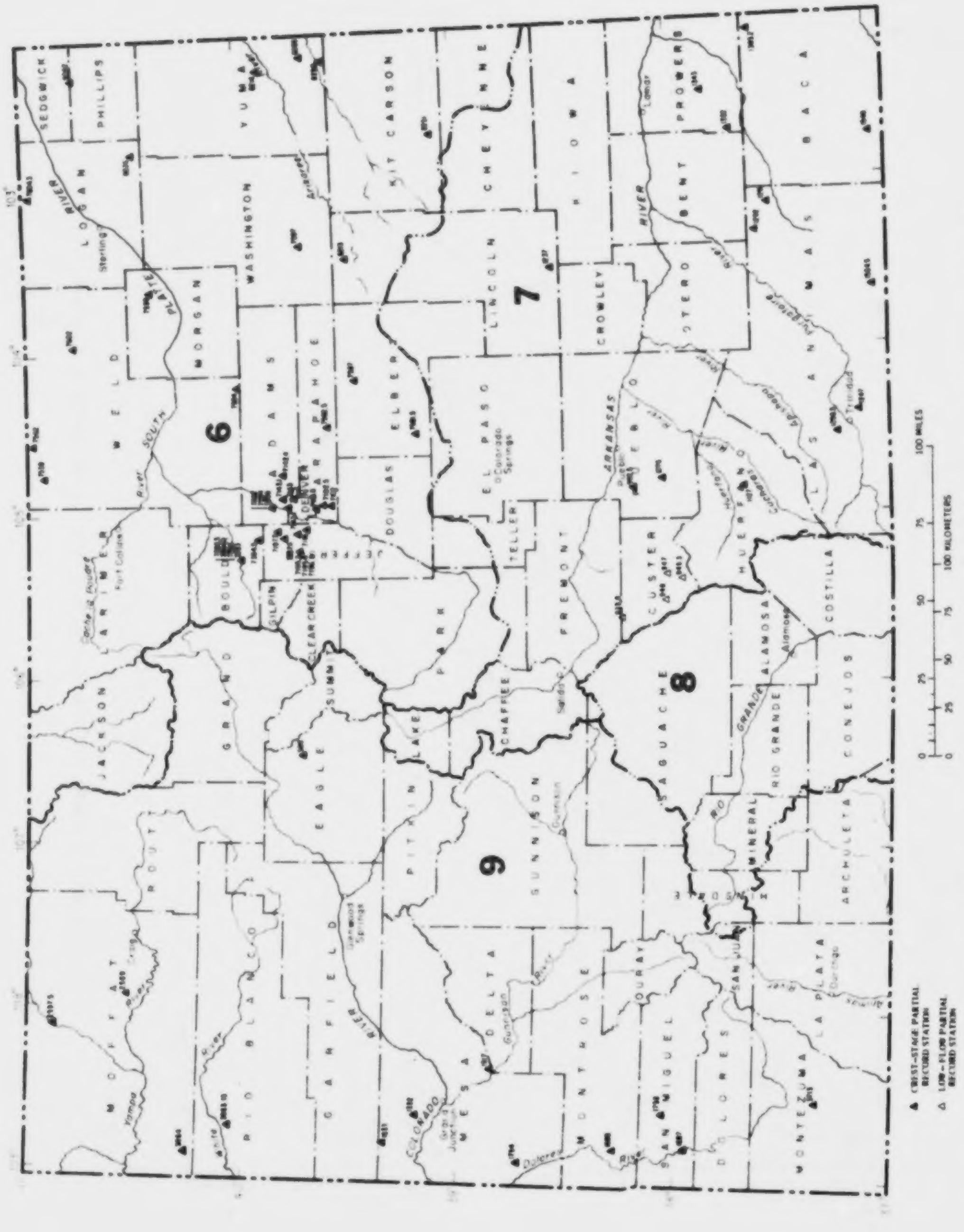

Figure 2.--Map showing locations of crest-stage partial-record stations in Colorado.

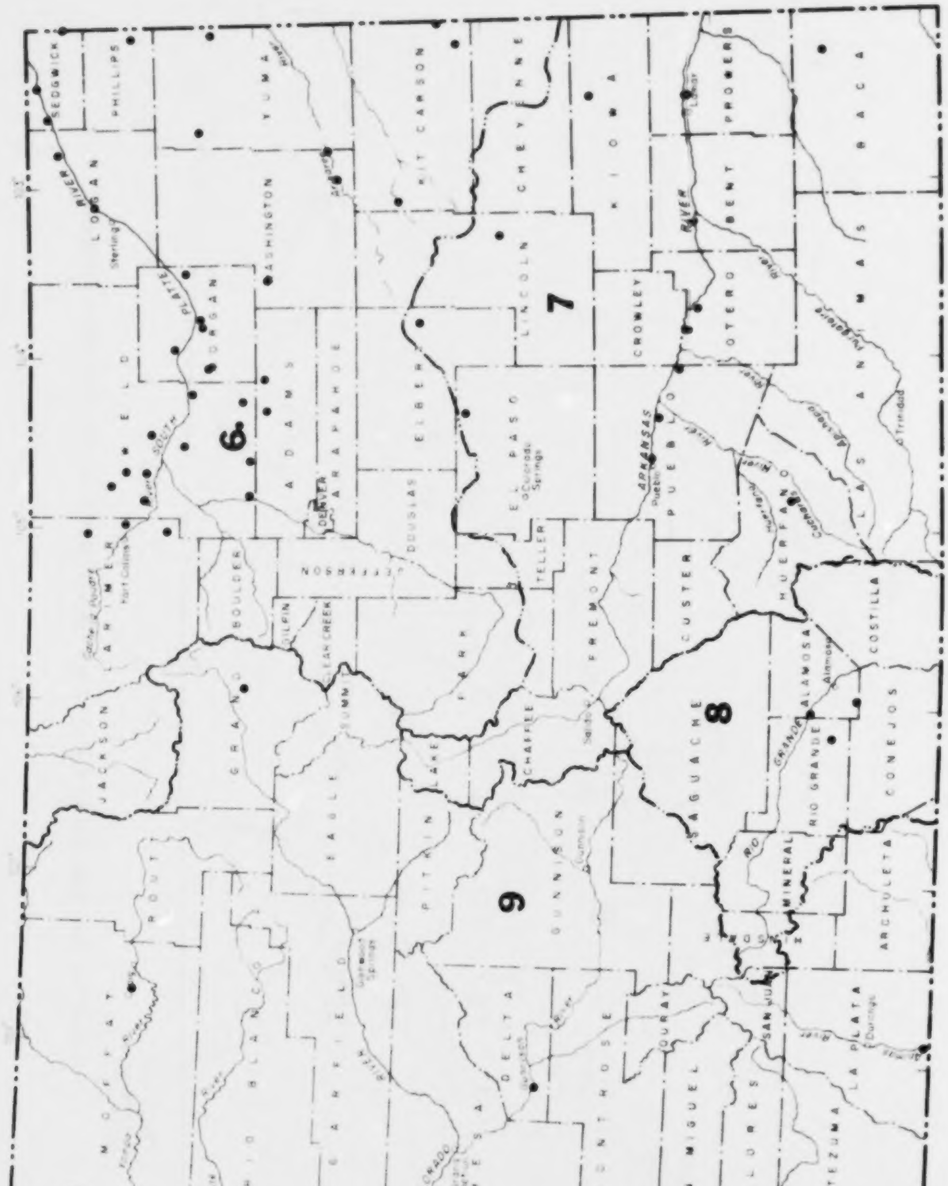

Figure 3.--Map showing locations of observation wells in Colorado.

COOPERATION

The U.S. Geological Survey and organizations of the State of Colorado have had cooperative agreements for the systematic collection of surface-water records since 1895, and for water-quality records since 1941. Organizations that assisted in collecting data for this report through cooperative agreement with the Survey are:

Colorado Division of Water Resources, C. J. Kuiper, State Engineer.
Colorado Water Conservation Board, F. L. Sparks, Director.
Colorado Department of Highways, Jack Kinstlinger, Executive Director.
Arkansas River Compact Administration, Frank G. Cooley, Chairman and Federal Representative.
Colorado River Water Conservation District, Roland C. Fischer,
Metropolitan Denver Sewage Disposal District No. 1, William E. Dorbitz, Manager.
Northern Colorado Water Conservation District, E. F. Phipps, Secretary-Manager.
Purgatoire River Water Conservancy District, Clyde Dawn, President. Secretary-Engineer.
Southwestern Water Conservation District, Robert H. Tyner, Manager.
Southeastern Colorado Water Conservancy District, C. L. Thomson, General Manager.
St. Vrain and Left Hand Water Conservancy District, James A. Cinea, Executive Director.
City and County of Denver, Board of Water Commissioners, Charles F. Brannan, President.
Eagle County Commissioners, Dale F. Grant, Chairman.
Pitkin County Board of County Commissioners, George Ochs, County Manager
City of Aspen, Phillip Mahoney, City Manager.
City of Aurora, C. A. Wemlinger, Director of Utilities.
Colorado City Water and Sanitation District, U. E. Cady, District Administrator.
City of Colorado Springs, Department of Public Utilities, James D. Phillips, Director.
City of Fort Collins, Roger E. Krempel, Director of Utilities.
City of Glenwood Springs, John D. West, Manager.

Financial assistance was also provided by the U.S. Army, Corps of Engineers, U.S. Army; Bureau of Indian Affairs, Bureau of Land Management, Bureau of Mines, Bureau of Reclamation, and the National Park Service, U.S. Department of the Interior; and the U.S.Environmental Protection Agency. Organizations that supplied data are acknowledged in station descriptions.

Some records have been collected and computed by contractors in accordance with U.S. Geological Survey specifications and under Geological Survey quality control.

HYDROLOGIC CONDITIONS

Water year 1978 was a year of extremes. The winter snowpack ranged from near 80 percent of normal in the Rio Grande basin to 150 percent of normal in the Yampa and White River basins. The summer was drier and warmer than usual with Denver recording a record of 52 days above 90 degrees. Streamflow varied from about 75 percent of normal in the southeast to about 150 percent of normal in the northwest part of the state.

Ground-water levels continued to decline in the northern High Plains, but remained constant in the alluvial river-channel aquifers.

NOTICE

During water year 1978, revisions were made in the terminology used to define 143 of the water-quality parameter codes that have been used by the Geological Survey in its publication of water-quality data and in its WATSTORE data system. These revisions were made to achieve consistency in terminology and to conform to a joint USGS-EPA agreement on terminology. They do not represent a change in the way the codes have been used in the past or in the association of specific code numbers with identified analytical procedures.

Use of the new terminology began with data for the 1978 water year, and therefore, it first appears in this publication. Definitions on which the terminology is based are included in the "Definitions" section of this report, and a table showing both old and new terminology is attached as an appendix to the report.

DEFINITION OF TERMS

Terms related to streamflow, water quality, and other hydrologic data as used in this report are defined below. See also the table for converting English units to metric units (International System, SI, units) on the inside of the back cover.

Acre-foot (AC-FT, acre-ft) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet or about 326,000 gallons or 1,233 cubic meters.

Algae are mostly aquatic single-celled, colonial, or multi-celled plants, containing chlorophyll and lacking roots, stems, and leaves.

Aquifer is a geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs.

Bacteria are microscopic unicellular organisms, typically spherical, rod-like, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, others perform an essential role in nature in the recycling of materials, for example, by decomposing organic matter into a form available for reuse by plants.

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria which ferment lactose with gas formation within 48 hours at 35°C. In the laboratory these bacteria are defined as all the organisms which produce colonies with a golden-green metallic sheen within 24 hours when incubated at 35°C ± 1.0°C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal coliform bacteria are bacteria that are present in the intestine or feces of warmblooded animals. They are often used as indicators of the sanitary quality of the water. In the laboratory they are defined as all organisms which produce blue colonies within 24 hours when incubated at 44.5°C ± 0.2°C on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal streptococcal bacteria are bacteria found also in the intestine of warmblooded animals; their presence in water is considered to verify fecal pollution. They are characterized as gram-positive, cocci bacteria which are capable of growth in brain-heart infusion broth. In the laboratory they are defined as all the organisms which produce red or pink colonies within 48 hours, at 35°C ± 1.0°C on M-enterrococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Bed material is the unconsolidated material of which a streambed, lake, pond, reservoir, or estuary bottom is composed.

Biochemical oxygen demand (BOD) is the amount of oxygen required by bacteria while stabilizing decomposable organic matter under aerobic conditions.

Biomass is the amount of living matter present at any given time, expressed as the weight per unit area of volume of habitat.

Ash weight is the weight of amount of residue present after the residue from the dry weight determination has been ashed in a muffle furnace at a temperature of 500°C for 1 hour. The ash weight values of zooplankton and phytoplankton are expressed in g/m^3 (grams per cubic meter), and peripnyton and benthic organisms in g/m^2 (grams per square meter).

Dry weight refers to the weight of residue present after drying in an oven at 60°C for zooplankton and 105°C for periphyton, until the weight remains unchanged. This weight represents the total organic matter, ash and sediments, in the sample. Dry weight values are expressed in the same units as ash weight.

Organic weight or volatile weight of the living substance is the difference between the dry weight and the ash weight, and represents the actual weight of the living matter. The organic weight is expressed in the same units as for ash and dry weights.

Wet weight is the weight of living matter plus contained water.

Bottom material See Bed material.

Cells/volume refers to the number of cells of any organism which is counted by using a microscope and grid or counting cell. Many planktonic organisms are multicelled and are counted according to the number of contained cells per sample, usually milliliters (mL) or liters(L).

Cfs-day is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, approximately 1.9835 acre-feet, about 646,000 gallons, or 2,445 cubic meters. It represents a runoff of approximately 0.0372 inch from 1 square mile, or 0.3468 millimeter from 1 square kilometer.

Chemical oxygen demand (COD) is a measure of the chemically oxidizable material in the water, and furnishes an approximation of the amount of organic and reducing material present. The determined value may correlate with natural water color or with carbonaceous organic pollution from sewage or industrial wastes.

Chlorophyll refers to the green pigments of plants. Chlorophyll *a* and *b* are the two most common green pigments in plants.

Contents is the volume of water in a reservoir or lake. Unless otherwise indicated, volume is computed on the basis of a level pool and does not include bank storage.

Control designates a feature downstream from the gage that determines the stage-discharge relation at the gage. This feature may be a natural constriction of the channel, an artificial structure, or a uniform cross section over a long reach of the channel.

Cubic foot per second (cfs, ft^3/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second, and is equivalent to approximately 7.48 gallons per second, 448.8 gallons per minute, or 0.02832 cubic meters per second.

Discharge is the volume of water (or more broadly, volume of fluid plus suspended sediment), that passes a given point within a given period of time.

Mean discharge (MEAN) is the arithmetic mean of individual daily mean discharges during a specific period.

Instantaneous discharge is the discharge at a particular instant of time.

Dissolved refers to that material in a representative water sample which passes through a 0.45 µm membrane filter. This is a convenient operational definition used by Federal agencies that collect water data. Determinations of "dissolved" constituents are made on subsamples of the filtrate.

Dissolved oxygen (DO) is the dissolved-oxygen content of water in equilibrium with air is a function of atmospheric pressure, and temperature and dissolved-solids content of the water. The ability of water to retain oxygen decreases with increasing temperature or dissolved solids, with small temperature changes having the more significant effect. Photosynthesis and respiration may cause diurnal variations in dissolved-oxygen content in water from some streams.

Drainage area of a stream at a specified location is that area, measured in a horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the stream above the specified point. Figures of drainage area given herein include all closed basins, or noncontributing areas, within the area unless otherwise noted.

Gage height (G.H.) is the water-surface elevation referred to some arbitrary gage datum. Gage height is often used interchangeably with the more general term "stage," although gage height is more appropriate when used with a reading on a gage.

Gaging station is a particular site on a stream, canal, lake, or reservoir where systematic observations of gage height or discharge are obtained. When used in connection with a discharge record, the term is applied only to those gaging stations where a continuous record of discharge is computed.

Hardness of water is the physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is attributable to the presence of alkaline earths (principally calcium and magnesium) and is expressed as equivalent calcium carbonate ($CaCO_3$).

Micrograms per liter (UG/L, µg/L) is a unit expressing the concentration of chemical constituents in solution as mass (micrograms) of solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to one milligram per liter.

Milligrams per liter (MG/L, mg/L) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represent the mass of solute per unit volume (liter) of water. Concentration of suspended sediment also is expressed in mg/L, and is based on the mass of sediment per liter of water-sediment mixturn.

Table 1.--Factors for conversion of chemical constituents in milligrams or micrograms per liter to milliequivalents per liter

Ion	Multi-ply by	Ion	Multi-ply by
Aluminum (Al^{+3})*......	0.11119	Iodide (I^{-1})..........	0.00788
Ammonia as N..........	.07143	Iron (Fe^{+3})*..........	.05372
Barium (Ba^{+2})..........	.01456	Lead (Pb^{+2})*..........	.00965
Bicarbonate (HCO_3^{-1})..	.01639	Lithium (Li^{+1})*.......	.14411
Bromide (Br^{-1})........	.01251	Magnesium (Mg^{+2})......	.08226
Calcium (Ca^{+2})........	.04990	Manganese (Mn^{+2})*.....	.03640
Carbonate (CO_3^{-2}).....	.03333	Nickel (Ni^{+2})*........	.03406
Chloride (Cl^{-1}).......	.02821	Nitrate as N..........	.07143
Chromium (Cr^{+6})*......	.11539	Nitrite as N..........	.07143
Cobalt (Co^{+2})*........	.03394	Phosphate,ortho as P..	.09686
Copper (Cu^{+2})*........	.03148	Potassium (K^{+1}).......	.02557
Cyanide (CN^{-1})........	.03844	Sodium (Na^{+1}).........	.04350
Fluoride (F^{-1})........	.05264	Strontium (Sr^{+2})*.....	.02283
Hydrogen (H^{+1})........	.99209	Sulfate (SO_4^{-2}).......	.02082
Hydroxide (OH^{-1})......	.05880	Zinc (ZN^{+2})*..........	.03060

*Constituents reported in micrograms per liter; multiply by factor and divide results by 1,000.

National Geodetic Vertical Datum of 1929 (NGVD) is a geodetic datum derived from a general adjustment of the first order level nets of both the United States and Canada. It was formerly called "Sea Level Datum of 1929" or "mean sea level" in this series of reports. Although the datum was derived from the average sea level over a period of many years at 26 tide stations along the Atlantic, Gulf of Mexico, and Pacific Coasts, it does not necessarily represent local mean sea level at any particular place.

Partial-record station is a particular site where limited streamflow data are collected systematically over a period of years for use in hydrologic analyses.

Particle size is the diameter, in millimeters (mm), of suspended sediment or bed material determined either by sieve or sedimentation methods. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube) determine fall diameter of particles in either distilled water (chemically dispersed) or in native water (the river water at the time and point of sampling).

Table 2.--Factors for conversion of sediment concentration in milligrams per liter to parts per million*
(All values calculated to three significant figures)

Range of concentration in 1000 mg/L	Divide by	Range of concentration in 1000 mg/L	Divide by	Range of concentration in 1000 mg/L	Divide by	Range of concentration in 1000 mg/L	Divide by
0 - 8	1.00	201-217	1.13	411-424	1.26	619-634	1.39
8.05- 24	1.01	218-232	1.14	427-440	1.27	636-650	1.40
24.2 - 40	1.02	234-248	1.15	443-457	1.28	652-666	1.41
40.5 - 56	1.03	250-264	1.16	460-473	1.29	668-682	1.42
56.5 - 72	1.04	266-280	1.17	476-489	1.30	684-698	1.43
72.5 - 88	1.05	282-297	1.18	492-506	1.31	700-715	1.44
88.5 -104	1.06	299-313	1.19	508-522	1.32	717-730	1.45
105 -120	1.07	315-329	1.20	524-538	1.33	732-747	1.46
121 -136	1.08	331-345	1.21	540-554	1.34	749-762	1.47
137 -152	1.09	347-361	1.22	556-570	1.35	765-780	1.48
153 -169	1.10	363-378	1.23	572-585	1.36	782-796	1.49
170 -185	1.11	380-393	1.24	587-602	1.37	798-810	1.50
186 -200	1.12	395-409	1.25	604-617	1.38		

*Based on water density of 1.000 g/mL and a specific gravity of sediment of 2.65.

Particle-size classification, as used in this report, agrees with recommendations made by the American Geophysical Union Subcommittee on Sediment Terminology. The classification is as follows:

Classification	Size (mm)	Method of analysis
Clay.............	0.00024 - 0.004	Sedimentation
Silt.............	.004 - .062	Sedimentation
Sand.............	.062 - 2.0	Sedimentation or sieve
Gravel...........	2.0 - 64.0	Sieve

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic material is removed and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water. Chemical dispersion is not used for native-water analysis.

Periphyton is the assemblage of microorganisms attached to and growing upon solid surfaces. While primarily consisting of algae, they also include bacteria, fungi, protozoa, rotifers, and other small organisms. Periphyton is a useful indicator of water quality.

Pesticide network is a network of regularly sampled water-quality stations where samples are collected to determine the concentration and distribution of pesticides in streams whose waters are used for irrigation or in streams in areas where potential contamination could result from the application of the commonly used insecticides and herbicides.

Pesticides are chemical compounds used to control undesirable plants and animals. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides. Insecticides and herbicides, which control insects and plants respectively, are the two categories reported.

Phytoplankton is the plant part of the plankton. They are usually microscopic and their movement is subject to the water currents. Phytoplankton growth is dependent upon solar radiation and nutrient substances. Because they are able to incorporate as well as release materials to the surrounding water, the phytoplankton have a profound effect upon the quality of the water. They are the primary food producers in the aquatic environment, and are commonly known as algae.

Blue-green algae are a group of phytoplankton organisms having a blue pigment, in addition to the green pigment called chlorophyll. Blue-green algae often cause nuisance conditions in water.

Diatoms are the unicellular or colonial algae having a siliceous shell. Their concentrations are expressed as number of cells per mL of sample.

Green algae have chlorophyll pigments similar in color to those of higher green plants. Some forms produce algal mats or floating "moss" in lakes. Their concentrations are expressed as number of cells per mL of sample.

Picocurie (PC, pCi) is one trillionth (1×10^{-12}) of the amount of radioactivity represented by a curie (Ci). A curie is the amount of radioactivity that yields 3.7×10^{10} radioactive disintegrations per second. A picocurie yields 2.22 dpm (disintegrations per minute).

Polychlorinated biphenyls (PCBs) are industrial chemicals that are mixtures of chlorinated biphenyl compounds having various percentages of chlorine. These compounds are similar in structure to organochlorine insecticides.

Radiochemical network is a network of regularly sampled water-quality stations where samples are collected monthly or twice a year (at high and low flow) to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

Radioisotopes are isotopic forms of an element that exhibit radioactivity. Isotopes are varieties of a chemical element that differ in atomic weight, but are very nearly alike in chemical properties. The difference arises because the atoms of the isotopic forms of an element differ in the number of neutrons in the nucleus. For example: Ordinary chlorine is a mixture of isotopes having atomic weights 35 and 37, with the natural mixture having atomic weight about 35.453. Many of the elements similarly exist as mixtures of isotopes, and a great many new isotopes have been produced in the operation of nuclear devices such as the cyclotron (Rose and Rose, 1966). There are 275 isotopes of the 81 stable elements in addition to over 800 radioactive isotopes.

Radioisotopes that are determined in this program are natural uranium in ug/L (micrograms per liter), radium as radium-226 in PC/l (pCi/L, picocuries per liter), gross beta radiation as equivalent strontium/yttrium-90 or cesium-137 in PC/L, and gross alpha radiation as micrograms of uranium equivalent per liter (ug/L). Gross alpha and beta radioactivity associated with the fine-grained (silt and clay-sized) sediments in the samples are also determined.

Recoverable from bottom material the amount of a given constituent that is in solution after a representative sample of bottom material has been digested by a method (usually using an acid or mixture of acids) that results in dissolution of only readily soluble substances. Complete dissolution of all bottom material is not achieved by the digestion treatment and thus the determination represents less than the total amount (that is, less than 95 percent) of the constituent in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Sediment is solid material that originates mostly from disintegrated rocks and is transported by, suspended in, or deposited from water; it includes chemical and biochemical precipitates and decomposed organic material, such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are influenced by environmental factors. Some major factors are degree of slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

Suspended sediment is the sediment that at any given time is maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid.

Suspended-sediment discharge is the rate at which dry weight of sediment passes a section of a stream or is the quantity of sediment, as measured by dry weight, or by volume, that is discharged in a given time. Suspended-sediment discharge in tons per day is computed by multiplying discharge times mg/L times 0.0027.

Total sediment discharge or total sediment load is the sum of the suspended-sediment discharge and the bedload discharge. It is the total quantity of sediment, as measured by dry weight or volume, that is discharged during a given time.

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 ft or 0.09 m above the bed) expressed as milligrams of dry sediments per liter of water-sediment mixture (mg/L).

Mean concentration is the time-weighted concentration of suspended sediment passing a stream section during a 24-hour day.

Sodium adsorption ratio (SAR) is the expression of relative activity of sodium ions in exchange reactions with soil and is an index of sodium or alkali hazard to the soil. This ratio should be known expecially for water used for irrigating farmland.

Solute is any substance derived from the atmosphere, vegetation, soil, or rocks and is dissolved in water.

Specific conductance is a measure of the ability of a water to conduct an electrical current and is expressed in micromhos per centimeter at 25°C. Because the specific conductance is related to the number and specific chemical types of ions in solution, it can be used for approximating the dissolved-solids content in the water. Commonly, the amount of dissolved solids (in milligrams per liter) is about 65 percent of the specific conductance (in micromhos per centimeter at 25°C). This relation is not constant from stream to stream or from well to well, and it may even vary in the same source with changes in the composition of the water.

Stage-discharge relation is the relation between gage height and the volume of water per unit of time, flowing in a channel.

Streamflow is the discharge that occurs in a natural channel. Although the term "discharge" can be applied to the flow of a canal, the word "streamflow" uniquely describes the discharge in a surface stream course. The term "streamflow" is more general than "runoff." Streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

Suspended, recoverable the amount of a given constituent that is in solution after the part of a representative water-suspended sediment sample that is retained on a 0.45 μm membrane filter has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all the particulate matter is not achieved by the digestion treatment and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Determinations of "suspended, recoverable" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total recoverable concentrations of the constituent.

Suspended, total the total amount of a given constituent in the part of a representative water-suspended sediment sample that is retained on a 0.45 μm membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to determine when the results should be reported as "suspended, total."

Determinations of "suspended, total" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total concentrations of the constituent.

Thermograph is a thermometer that continuously and automatically records, on a chart, the water temperature of a stream. "Temperature recorder" is the term used to indicate the location of the thermograph.

Time-weighted average is computed by multiplying the number of days in the sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the total number of days. A time-weighted average represents the composition of water that would be contained in a vessel or reservoir that had received equal quantities of water from the stream each day for the water year.

Tons per acre-foot indicates the dry weight of dissolved solids in tons (0.9072 tonnes) in 1 acre-foot (1,233 m^3) of water. It is computed by multiplying the concentration in milligrams per liter by 0.00136.

Tons per day is the quantity of a substance in solution or suspension in tons (0.9072 tonnes) that passes a stream section during a 24-hour period.

Total the total amount of a given constituent in a representative water-suspended sediment sample, regardless of the constituent's physical or chemical form. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent present in both the dissolved and suspended phases of the sample. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total." (note that the word "total" does double duty here, indicating both that the sample consists of a water-suspended sediment mixture and that the analytical method determines all of the constituent in the sample.)

Total in bottom material the total amount of a given constituent in a representative sample of bottom material. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total in bottom material."

Total, recoverable the amount of a given constituent that is in solution after a representative water-suspended sediment sample has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all particulate matter is not achieved by the digestion treatment, and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the dissolved and suspended phases of the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Water year in Geological Survey is the 12-month period, October 1 through September 30. The water year is designated by the calendar year in which it ends and which includes 9 of the 12 months. Thus, the year ending September 30, 1977, is called the "1977 water year."

Weighted average is used in this report to indicate the discharge-weighted average. It is computed by multiplying the discharge for a sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the sum of the discharges. A discharge-weighted average approximates the composition of water that would be found in a reservoir containing all the water passing a given location during the water year after thorough mixing in the reservoir.

WDR is an abbreviation for "Water-Data Report" in the summary REVISIONS paragraph to refer to State annual basic-data reports published after 1974.

WRD is used as an abbreviation for "Water-Resources Data" in the summary REVISIONS paragraph to refer to State annual basic-data reports published prior to 1975.

WSP is used as an abbreviation for "Water-Supply Paper" in reference to published reports.

Zooplankton is the animal part of the plankton. Zooplankton are capable of extensive movements within the water column, and are often large enough to be seen with the unaided eye. Zooplankton are secondary consumers feeding upon bacteria, phytoplankton, and detritus. Because they are the grazers in the aquatic environment, the zooplankton are a vital part of the aquatic food web. The zooplankton community is dominated by small crustaceans and rotifers.

SPECIAL NETWORKS AND PROGRAMS

Some of the stations for which data are published in this report are included in special networks and programs. These stations are identified by their title, set in parentheses, under the station name.

Hydrologic bench-mark station is one that provides hydrologic data for a basin in which the hydrologic regimen will likely be governed solely by natural conditions. Data collected at a bench-mark station may be used to separate effects of natural from manmade changes in other basins which have been developed and in which the physiography, climate, and geology are similar to those in the undeveloped bench-mark basin.

Irrigation-network stations are water-quality stations located at or near certain streamflow gaging stations west of the main stem of the Mississippi River. Data collected at these stations are used to evaluate the chemical quality of surface waters used for irrigation and the changes resulting from the drainage of irrigated lands. Prior to water year 1966, the data for these stations were published in the annual Water-Supply Paper series, "Quality of Surface Water for Irrigation, Western States."

National stream-quality accounting network is an accounting network designed by the U.S. Geological Survey to meet many of the information demands of agencies or groups involved in national or regional water-quality planning and management. Both accounting and broad-scale monitoring objectives have been incorporated in the network design. Areal configuration of the network is based on river-basin accounting units designated by the Office of Water Data Coordination in consultation with the Water Resources Council. Primary objectives of the network are: (1) To depict areal variability of water-quality conditions nationwide on a year-by-year basis, and (2) to detect and assess long-term changes in stream quality.

DOWNSTREAM ORDER AND STATION NUMBER

Stations are listed in a downstream direction along the main stream, and stations on tributaries are listed between stations on the main stream in the order in which those tributaries enter the main stream. Stations on tributaries entering above all mainstream stations are listed before the first mainstream station. Stations on tributaries to tributaries are listed in a similar manner. In the list of gaging stations in the front of this report the rank of tributaries is indicated by indention, each indention representing one rank.

As an added means of identification, each gaging station and each partial-record station has been assigned a station number. These are in the same downstream order used in this report. In assigning station numbers, no distinction is made between partial-record stations and continuous-record gaging stations; therefore, the station number for a partial-record station indicates downstream order position in a list made up of both types of stations. Water-quality stations located at or near gaging stations or partial-record stations have the same number as the gaging or partial-record station.

Gaps are left in the numbers to allow for new stations that may be established; hence the numbers are not consecutive. The complete 8-digit number for each station, such as 07083000, which appears just to the left of the station name, includes the 2-digit part number "07" plus the 6-digit downstream order number "083000." In this report the records are listed in downstream order by parts. The part number refers to an area whose boundaries coincide with certain natural drainage lines. Records in this report are for Part 6 (Missouri River basin), Part 7 (Lower Mississippi River basin), and Part 8 (Western Gulf of Mexico basins). Records for Part 9 (Colorado River Basin) are in Volumes 2 and 3. All records for a drainage basin encompassing more than one State can be arranged in downstream order by assembling pages from the various State reports by station number to include all records in the basin.

EXPLANATION OF SURFACE-WATER RECORDS

Collection and Computation of Data

The base data collected at gaging stations consist of records of stage and measurements of discharge of streams or canals, and stage, surface area, and contents of lakes or reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement base data in determining the daily flow or volume of water in storage. Records of stage are obtained from direct readings on a nonrecording gage or from a water-stage recorder that gives either a continuous graph of the fluctuations or a tape punched at 5-, 15-, 30- or 60-minute intervals. Measurements of discharge are made with a current meter, using the general methods adopted by the Geological Survey on the basis of experience in stream gaging since 1888. These methods are described in standard textbooks, in Water-Supply Paper 888, and in U.S. Geological Survey Techniques of Water Resources Investigations, book 3, chapter A6. Surface areas of lakes or reservoirs are determined from instrument surveys using standard methods. The configuration of the reservoir bottom is determined by sounding at many points.

For stream-gaging stations, rating tables giving the discharge for any stage are prepared from stage-discharge relation curves. If extensions to the rating curves are necessary to express discharge greater than measured, they are made on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements, computation of flow over dams or weirs), velocity-area studies, and logarithmic plotting. The daily mean discharge is computed from gage heights and rating tables, then the monthly and yearly mean discharge are computed from the daily figures. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is computed by the shifting-control method, in which correction factors based on individual discharge measurements and notes by engineers and observers are used in applying the gage heights to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the control, the daily mean discharge is computed by what is basically the shifting-control method.

At some stream-gaging stations the stage-discharge relation is affected by ice in the winter, and it becomes impossible to compute the discharge in the usual manner. Discharge for periods of ice effect is computed on the basis of the gage-height record and winter discharge measurements, consideration being given to the available information on temperature and precipitation, notes by gage observers and hydrologists, and comparable records of discharge for other stations in the same or nearby basins.

For a lake or reservoir station, capacity tables giving the contents for any stage are prepared from stage-area relation curves defined by surveys. The application of the stage to the capacity table gives the contents, from which the daily, monthly, or yearly change in contents is computed.

If the stage-capacity curve is subject to changes because of deposition of sediment in the reservoir, periodic resurveys of the reservoir are necessary to define new stage-capacity curves. During the period between reservoir surveys the computed contents may be increasingly in error due to the gradual accumulation of sediment.

For some gaging stations there are periods when no gage-height record is obtained or the recorded gage height is so faulty that it cannot be used to compute daily discharge or contents. This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods the daily discharges are estimated on the basis of recorded range in stage, adjoining good record, discharge measurements, weather records, and comparison with other station records from the same or nearby basins. Likewise daily contents may be estimated on the basis of operator's log, adjoining good record, inflow-outflow studies, and other information.

The data in this report generally comprise a description of the station and tabulations of daily and monthly figures. For gaging stations on streams or canals a table showing the daily discharge and monthly and yearly discharge is given. For gaging stations on lakes and reservoirs a monthly summary table of stage and contents or a table showing the daily contents is given. Records are published for the water year, which begins on October 1 and ends on September 30. A calendar for the current water year is shown on the inside of the front cover to facilitate finding the day of the week for any date.

The description of the gaging stations gives the location, drainage area, period of record, type and history of gages, average discharge, extremes of discharge or contents, general remarks, and notations of revisions or previously published records. The location of the gaging station and the drainage area are obtained from the most accurate maps available.

River mileage, given under "LOCATION" for some stations, is that determined and used by the Corps of Engineers or other agencies.

Periods for which there are published records for the present station or for stations generally equivalent to the present one are given under "PERIOD OF RECORD."

Previously published records of some stations have been found to be in error on the basis of data or information later obtained. Revisions of such records are usually published along with the current records in one of the annual or compilation reports. In order to make it easier to find such revised records, a paragraph headed "REVISED RECORDS" has been added to the description of all stations for which revised records have been published. Listed therein are all the reports in which revisions have been published, each followed by the water years for which figures are revised in that report. In listing the water years only one number is given; for instance, 1933 stands for the water year October 1, 1932, to September 30, 1933. If no daily, monthly, or annual figures of discharge were revised, that fact is brought out by notations after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)," that only the instantaneous minimum was revised; and "(P)," that only peak discharges were revised. If the drainage area has been revised, the report in which the revised figure was first published is given.

The type of gage currently in use; the datum of the present gage referred to National Geodetic Vertical Datum; and a condensed history of the types, locations, and datums of previous gages used during the period of record are given under "GAGE." National Geodetic Vertical Datum is explained in "DEFINITION OF TERMS."

Information pertaining to the accuracy of the discharge records, to conditions that affect the natural flow at the gaging station, availability of water-quality records, and reservoir stations information on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir, is given under "REMARKS."

The average discharge for the number of years indicated is given under "AVERAGE DISCHARGE;" it is not given for stations having fewer than 5 complete years of record or for stations where changes in water development during the period of record cause the figure to have little significance.

The maximum discharge (or contents) and the maximum gage height, the minimum discharge if there is little or no regulation (or minimum contents), and the minimum gage height, if it is significant, are given under "EXTREMES." The minimum daily discharge is given if there is extensive regulation (also the minimum discharge and gage height if they are abnormally low). The first paragraph are extremes for period of record, second, information available outside the period of record, and last, those for the current year. Unless otherwise qualified, the maximum discharge (or contents) is the instantaneous maximum corresponding to the crest stage obtained by use of a water-stage recorder (graphic or digital), a crest-stage gage, or a nonrecording gage read at the time of the crest. If the maximum gage height did not occur on the same day as the maximum discharge (or contents), it is given separately. Similarly, the minimum is the instantaneous minimum unless otherwise qualified. For some stations peak discharges are listed with "EXTREMES FOR THE CURRENT YEAR;" if they are, all independent peaks, including the maximum for the year, above the selected base with the time of occurrence and corresponding gage heights are published in tabular format. The base discharge, which is given in the table heading, is selected so that an average of about three peaks a year will be presented. Peak discharges are not published for any canals, ditches, drains, or for any stream for which the peaks are subject to substantial control by man. Time of day is expressed in 24-hour local standard time; for example, 12:30 a.m. is 0030, 1:30 p.m. is 1330. The minimums for these stations are published in a separate paragraph following the table of peaks.

Footnotes to the table of daily discharges are introduced by the word "NOTE." Footnotes are used to indicate periods for which the discharge is computed or estimated by special methods because of no gage-height record, backwater from various sources, or other unusual conditions. Periods of no gage-height record are indicated if the period is continuous for a month or more or includes the maximum discharge for the year. Periods of backwater from an unusual source, of indefinite stage-discharge relation, or of any other unusual condition at the gage site are indicated only if they are a month or more in length and the accuracy of the records is affected. Days on which the stage-discharge relation is affected by ice are not indicated. The methods used in computing discharge for various unusual conditions have been explained in preceding paragraphs.

The daily table for stream-gaging stations gives the mean discharge for each day and is followed by monthly and yearly summaries. In the monthly summary below the daily table, the line headed "TOTAL" gives the sum of the daily figures. The line headed "MEAN" gives the average flow in cubic feet per second (ft^3/s) during the month. The lines headed "MAX" and "MIN" give the maximum and minimum daily discharges, respectively, for the month. Discharge for the month is also expressed in acre-feet (line headed "AC-FT"). In the yearly summary below the monthly summary, the figures following "MAX" are the maximum daily discharges for the calendar and water years; likewise, those following "MIN" are the minimum daily discharges.

For most gaging stations on lakes and reservoirs the data presented comprise a description of the station and a monthly summary table of stage and contents. For some reservoirs a table showing daily contents or stage is given. A skeleton table of capacity at given stages is published for all reservoirs for which records are published on a daily basis, but is not published for reservoirs for which only monthly data are given.

Data collected at partial-record stations and at miscellaneous sites are given in tables at the end of the gaging-station records in this report. The first is a table of discharge measurements at low-flow partial-record stations, the second is a table of annual maximum stage and discharge at crest-stage stations, the third is a table of storm precipitation and related runoff at storm-runoff partial-record stations, and the fourth is a table of discharge measurements at miscellaneous sites.

ACCURACY OF DATA

The accuracy of streamflow data depends primarily on: (1) The stability of the stage-discharge relation or, if the control is unstable, the frequency of discharge measurements, and (2) the accuracy of observations of stage, measurements of discharge, and interpretation of records.

The station description under "REMARKS" states the degree of accuracy of the records. "Excellent" means that about 95 percent of the daily discharges is within 5 percent; "good" means within 10 percent; and "fair" within 15 percent. "Poor" means that daily discharges have less than "fair" accuracy.

Figures of daily mean discharge in this report are shown to the nearest hundredth of a cubic foot per second (ft^3/s) for discharges of less than 1 ft^3/s; to tenths between 1.0 and 10 ft^3/s; to whole numbers between 10 and 1,000 ft^3/s; and to 3 significant figures above 1,000 ft^3/s. The number of significant figures used is based solely on the magnitude of the figure. The same rounding rules apply to discharge figures listed for partial-record stations and miscellaneous sites.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumption, regulation by storage, evaporation, or other factors. However, because all the effects cannot be measured or evaluated, satisfactory adjustments generally cannot be made. For some stations, available figures of diversions or change in contents of reservoirs are included as supplemental data. Even at those stations where adjustments can be made, large errors in computed runoff may occur if adjustments or losses are large in comparison with the observed discharge.

PUBLICATIONS

In each Water-Supply Paper entitled, "Surface Water Supply of the United States" there is a list of numbers of preceding Water-Supply Papers containing streamflow information for the area covered by that report. In addition, there is a list of numbers of Water-Supply Papers containing detailed information on major floods in the area. Records for stations in Colorado for the period October 1960 to September 1965 are in Water-Supply Papers 1918, 1919, 1921, 1923, 1924, and 1925; and for the period October 1965 to September 1970 are in Water-Supply Papers 2118, 2119, 2121, 2123, 2124, and 2125.

Two series of summary reports entitled, "Compilation of Records of Surface Waters of the United States" have been published; the first series covers the entire period of record through September 1950 and the second series covers the period October 1950 to September 1960. These reports contain summaries of monthly and annual discharge and monthend storage for all previously published records, as well as some records not contained in the annual series of water-supply papers. All records were reexamined and revised where warranted. Estimates of discharge were made to fill short gaps where practical. The yearly summary table for each gaging station lists the numbers of the water-supply papers in which daily records were published for that station. Records for stations in Colorado are compiled in Water-Supply Papers 1310, 1311, 1312, and 1313 through September 1950; and in Water-Supply Papers 1730, 1731, 1732, and 1733 for October 1950 to September 1960.

Special reports on major floods or droughts or of other hydrologic studies for the area have been issued in publications other than water-supply papers. Information relative to these reports may be obtained from the district office.

OTHER DATA AVAILABLE

Information of a more detailed nature than that published for most of the gaging stations, such as discharge measurements, gage-height records, and rating tables, is on file in the district office. Also most gaging-station records are available in computer-usable form and many statistical analyses have been made.

RECORDS OF DISCHARGE COLLECTED BY AGENCIES OTHER THAN THE GEOLOGICAL SURVEY

Records of discharge not published by the Geological Survey were collected at many sites in Colorado during the water year by the following agencies: City of Colorado Springs; Colorado Division of Water Resources; Forest Service, U.S. Department of Agriculture; City and County of Denver, Board of Water Commissioners; National Weather Service, Department of Commerce; and Bureau of Reclamation, U.S. Department of the Interior.

EXPLANATION OF WATER-QUALITY RECORDS

COLLECTION AND EXAMINATION OF DATA

Water samples for analyses usually are collected at or near gaging stations. The discharge records at these stations are used in conjunction with the computations of the chemical constituents and sediment loads.

Descriptive statements are given for water-quality stations located at or near streamflow stations. Information given includes the location, drainage area, periods of record for the various water-quality data, extremes of the pertinent data, and general remarks in a format similar to that used for streamflow gaging stations.

Water-quality information is presented for chemical, biological, and microbiological quality, water temperature, and fluvial sediment. Chemical quality includes concentrations of individual dissolved constituents and certain properties or characteristics such as hardness, sodium-absorption-ratio, specific conductance, and pH.

The biological information includes qualitative and quantitative analyses of plankton, bottom organisms, and particulate inorganic and amorphous matter present. Microbiological information includes quantitative identification of certain bacteriological indicator organisms.

Prior to the 1968 water year, data for chemical constituents and concentrations of suspended sediment were reported in parts per million (ppm) and water temperatures were reported in degrees Fahrenheit (°F). In October 1967, the Geological Survey began reporting data for chemical constituents and concentrations of suspended sediment in milligrams per liter (mg/L) and water temperatures in degrees Celsius (°C). In waters with a density of 1.000 g/mL (grams per milliliter), parts per million and milligrams per liter can be considered equal. In waters with a density greater than 1.000 g/mL, values in parts per million should be multiplied by the density to convert to milligrams per liter. Temperature reported in degrees Celsius may be converted to degrees Fahrenheit by using table 3.

TEMPERATURE

Water temperatures were measured at most of the water-quality stations. In addition, water temperatures are taken at the time of discharge measurements for surface-water stations. For daily stations, the water temperatures are taken at about the same time each day when the sample is collected. At stations where continuously recording thermographs are present, the records consist of maximum and minimum temperatures for each day; stations equipped with noncontinuous digital monitors provide temperature records based on hourly punches.

Large streams have a small diurnal temperature change; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges.

Table 3.--Degrees Celsius (°C) to degrees Fahrenheit (°F)*
(Temperature reported to nearest 0.5°C)

°C	°F	°C	°F	°C	°F	°C	°F	°C	°F
0.0	32	10.0	50	20.0	68	30.0	86	40.0	104
.5	33	10.5	51	20.5	69	30.5	87	40.5	105
1.0	34	11.0	52	21.0	70	31.0	88	41.0	106
1.5	35	11.5	53	21.5	71	31.5	89	41.5	107
2.0	36	12.0	54	22.0	72	32.0	90	42.0	108
2.5	36	12.5	54	22.5	72	32.5	90	42.5	108
3.0	37	13.0	55	23.0	73	33.0	91	43.0	109
3.5	38	13.5	56	23.5	74	33.5	92	43.5	110
4.0	39	14.0	57	24.0	75	34.0	93	44.0	111
4.5	40	14.5	58	24.5	76	34.5	94	44.5	112
5.0	41	15.0	59	25.0	77	35.0	95	45.0	113
5.5	42	15.5	60	25.5	78	35.5	96	45.5	114
6.0	43	16.0	61	26.0	79	36.0	97	46.0	115
6.5	44	16.5	62	26.5	80	36.5	98	46.5	116
7.0	45	17.0	63	27.0	81	37.0	99	47.0	117
7.5	45	17.5	63	27.5	81	37.5	99	47.5	117
8.0	46	18.0	64	28.0	82	38.0	100	48.0	118
8.5	47	18.5	65	28.5	83	38.5	101	48.5	119
9.0	48	19.0	66	29.0	84	39.0	102	49.0	120
9.5	49	19.5	67	29.5	85	39.5	103	49.5	121

*°C=5/9(°F-32°) or °F=9/5(°C)+32°.

In October 1968, the Geological Survey began reporting many of the chemical constituents as well as the minor elements in micrograms per liter instead of milligrams per liter. (See "Definition of Terms," and table 5 for converting English units to SI units.)

SOLUTES

Most methods for collecting and analyzing water samples to determine the kinds and concentrations of solutes are described by Brown, Skougstad, and Fishman (1970). Analysis of pesticides and organic substances in water are described by Goerlitz and Lamar (1967), Lamar, Goerlitz, and Law (1965), and Goerlitz and Brown (1972). The collection and analysis of aquatic, biological, and microbiological samples are described by Slack and others (1973).

One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled through several vertical sections to obtain a representative sample needed for an accurate mean concentration and for use in calculating load.

Chemical-quality data published in this report are considered to be the most representative values available for the stations listed. The values reported represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. In the rare case where an apparent inconsistency exists between the reported pH value and the relative abundance of carbon dioxide species (carbonate and bicarbonate), the inconsistency is the result of a slight uptake of carbon dioxide from the air by the sample between measurement of pH in the field and determination of carbonate and bicarbonate in the laboratory.

For chemical-quality stations equipped with noncontinuous digital monitors, the records are based upon hourly punches beginning at 0100 hours and ending at 2400 hours for the day of record. More detailed records (hourly values) may be obtained from the Geological Survey district office at the address given on the back of the title page of this report.

SEDIMENT

Suspended-sediment concentrations are determined from samples collected by using depth-integrating samplers. Samples usually are obtained at several verticals in the cross section, or a single sample may be obtained at a fixed point and a coefficient applied to determine the mean concentration in the cross sections.

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the subdivided day method (time-discharge weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the subdivided day method. For periods when no samples were collected, daily loads of suspended sediment were estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge. A blank in the daily mean concentration column of the suspended-sediment discharge table indicates the value in the sediment discharge column was estimated. A zero value in the sediment discharge column when there are nonzero values in the mean discharge and mean concentration columns indicates the load is less than 0.005 tons per day.

At other stations, suspended-sediment samples were collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observations, such data are useful in establishing seasonal relations between quality and streamflow in predicting long-term sediment-discharge characteristics of the streams.

In addition to the records of the quantities of suspended sediment, records of the periodic measurements of the particle-size distribution of the suspended sediment and bed material are included.

WATER-SUPPLY PAPERS

The annual series of Water-Supply Papers that give information on quality of surface waters in Colorado Are shown in the following table:

Table 4.--Water-Supply Paper numbers and parts, water years 1941-71

Year	Part 6	Part 7	Part 8	Part 9	Irrigation (1951-65)[a]
1941	942	942	942	942	----
1942	950	950	950	950	----
1943	970	970	970	970	----
1944	1022	1022	1022	1022	----
1945	1030	1030	1030	1030	----
1946	1050	1050	1050	1050	----
1947	1102	1102	1102	1102	----
1948	1132	1133	1133	1133	----
1949	1162	1163	1163	1163	----
1950	1187	1188	1188	1189	----
1951	1198	1199	1199	1200	1264
1952	1251	1252	1252	1253	1362
1953	1291	1292	1292	1293	1380
1954	1351	1352	1352	1353	1430
1955	1401	1402	1402	1403	1465
1956	1451	1452	1452	1453	1485
1957	1521	1522	1522	1523	1524
1958	1572	1573	1573	1574	1575
1959	1643	1644	1644	1645	1699
1960	1743	1744	1744	1745	1746
1961	1883	1884	1884	1885	1886
1962	1943	1944	1944	1945	1946
1963	1949	1950	1950	1951	1952
1964	1956	1957	1957	1958	1960
1965	1963	1964	1964	1965	1967
1966	1993	1994	1994	1995	----
1967	2013	2014	2014	2015	----
1968	2095	2096	2097	2098	----
1969	2145	2146	2147	2148	----
1970	2155	2156	2157	2158	----
1971	[b]2165	[b]2166	[b]2167	[b]2168	----

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[a] Annual series, "Quality of Surface Waters for Irrigation, Western States."

[b] In preparation.

Information about reports and other data on quality of water in Colorado may be obtained from the district office at the address given on the back of the title page of this report.

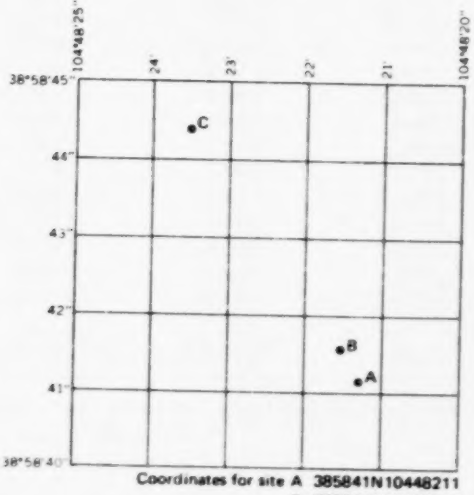
EXPLANATION OF GROUND-WATER-LEVEL RECORDS

COLLECTION OF DATA

Only ground-water-level data from a basic national network of observation wells are published in this report. These water-level measurements are intended to provide a record of water-level changes in important aquifers.

The locations of wells are referenced by two systems. One system is based on latitude and longitude, and the second is based on the U.S. Bureau of Land Management system of land subdivision. The latitude and longitude grid system facilitates machine processing of data and plotting of data points.

The latitude and longitude grid system is used to provide the geographic location of each well. The number consists of 15 digits. The first six digits denote the degrees, minutes, and seconds of latitude; N designates north; the next seven digits denote degrees, minutes, and seconds of longitude; and the last digit is a sequential number for wells within a 1-second grid, as shown below in figure 4.



Coordinates for site A 385841N10448211
B 385841N10448212
C 385844N10448230

Figure 4.--System for numbering wells and miscellaneous sites (latitude and longitude).

The local well number locates a well within a 10-acre (4.0-ha) tract using the U.S. Bureau of Land Management system of land subdivision. The components of the local well number proceed from the largest to the smallest land subdivisions. This is in contrast to the legal description, which proceeds from the smallest to the largest land subdivision. The largest subdivision is the survey. Colorado is governed by three surveys: The Sixth Principal Meridian Survey (S), the New Mexico Survey (N), and the Ute Survey (U). Costilla County was not included in any of the above official surveys. This report follows the convention of the Costilla County Assessor in which the northern part of the county is governed by the Sixth Principal Meridian Survey and the southern part of the county is governed by a local system called the Costilla Survey (C). The first letter of the well location designates the survey.

A survey is subdivided into four quadrants formed by the intersection of the baseline and the principal meridian. The second letter of the well location designates the quadrant: A indicates the northeast quadrant, B the northwest, C the southwest, and D the southeast. A quadrant is subdivided in the north-south direction every 6 mi (10 km) by townships and is subdivided in the east-west direction every 6 mi (10 km) by ranges. The first number of the well location designates the township and the second number designates the range.

The 36-mi^2 (93-km^2) area described by the township and range designation is subdivided into 1-mi^2 (2.59-km^2) areas called sections. The sections are numbered sequentially. The third number of the well location designates the section. The section, which contains 640 acres (259 ha), is subdivided into quarter sections. The 160-acre (64.8-ha) area is designated by the first letter following the section: A indicates the northeast quarter, B the northwest, C the southwest, and D the southeast. The quarter section is subdivided into quarter-quarter sections. The 40-acre (16.2-ha) area is designated in the same manner by the second letter following the section. The quarter-quarter section is subdivided into quarter-quarter-quarter sections. The 10-acre (4.0-ha) area is designated in the same manner by the third letter following the section. If more than one well is located within the 10-acre (4.0-ha) tract, the wells are numbered sequentially in the order in which they were originally inventoried. If this number is necessary, it will follow the three-letter designation.

The local number is provided for continuity with older reports.

Measurements are made in many types of wells under varying conditions, but the methods of measurement are standardized to the extent possible. The equipment and measuring techniques used at each observation well insure that measurements at each well are of consistent accuracy and reliability.

Water-level measurements in this report are given in feet with reference to either mean sea level (msl) or land-surface datum (lsd). Mean sea level is the datum plane on which the national network of precise levels is based; land-surface datum is a datum plane that is approximately at land surface at each well. If known, the altitude of the land-surface datum above mean sea level is given in the well description. The height of the measuring point (MP) above or below land-surface datum is given in each well description. Water levels in wells equipped with recording gages are reported for every fifth day and the end of each month (eom).

Water levels are reported to as many significant figures as can be justified by the local conditions. For example, in a measurement of a depth to water of several hundred feet, the error of determining the absolute value of the total depth to water may be a few tenths of a foot, whereas the error in determining the net change of water level between successive measurements may be only a hundredth of a few hundredths of a foot. For lesser depths to water, the accuracy is greater. Accordingly, most measurements are reported to a hundredth of a foot, but some are given only to a tenth of a foot or a larger unit.

PUBLICATIONS

Publication of ground-water-level data for the United States in Water-Supply Papers was begun by the U.S. Geological Survey in 1935. From 1935 through 1939, a single Water-Supply Paper covering the entire nation was issued each year (Water-Supply Papers 777, 817, 840, 845, and 886). From 1940 through 1974, separate Water-Supply Papers were issued for six sections of the United States. Water-level data for Colorado are included in the Water-Supply Papers listed below, each report containing one or more calendar years (January through December) of data. Data in this report are for the 12-month water year ending September 30.

Calendar year	WSP no.	Calendar year	WSP no.	Calendar year	WSP no.	Calendar year	WSP no.
1940	910	1945	1027	1950	1169	1955	1408
1941	940	1946	1075	1951	1195	1956-60	1760
1942	948	1947	1100	1952	1225	1961-65	1845
1943	990	1948	1130	1953	1269	1966-70	1980
1944	1020	1949	1160	1954	1325		

Information about reports and other data on ground water in Colorado may be obtained from the district office at the address given on the back of the title page of this report.

SELECTED REFERENCES

The following publications are available for background information on the methods for collecting, analyzing, and evaluating the chemical and physical properties of surface waters:

American Public Health Association, and others, 1971, Standard methods for the examination of water and waste water, 13th ed: Am. Public Health Assoc., New York, 874 p.

Barker, F. B., and Johnson, J. O., 1964, Determination of radium in water: U.S. Geol. Survey Water-Supply Paper 1696-B, 29 p.

Barker, F. B., and others, 1965, Determination of uranium in natural water: U.S. Geol. Survey Water-Supply Paper 1696-C, 25 p.

Barker, F. B., and Robinson, B. P., 1963, Determination of beta activity in water: U.S. Geol. Survey Water-Supply Paper 1969-A, 32 p.

Barnett, P. R., and Mallory, E. C., Jr., 1971, Determination of minor elements in water by emission spectroscopy: U.S. Geol. Survey Techniques of Water-Resources Inv., book 5, chap. A2, 31 p.

Brown, Eugene, Skougstad, M. W., and Fishman, M. J., 1970, Methods for collection and analysis of water samples for dissolved minerals and gases: U.S. Geol. Survey Techniques of Water-Resources Inv., book 5, chap A1, 160 p.

Carter, R. W., and Davidian, Jacob, 1968, General procedures for gaging streams: U.S. Geol. Survey Techniques of Water-Resources Inv., book 3, chap. A6, 13 p.

Clarke, F. W., 1924, The composition of the river and lake waters of the United States: U.S. Geol. Survey Prof. Paper 135, 199 p.

Colby, B. R., 1963, Fluvial sediments--a summary of source, transportation, deposition, and measurements of sediment discharge: U.S. Geol. Survey Bull. 1181-A, 47 p.

Colby, B. R., and Hembree, C. H., 1955, Computations of total sediment discharge, Niobrara River near Cody, Nebraska: U.S. Geol. Survey Water-Supply Paper 1357, 187 p.

Colby, B. R., and Hubbell, D. W., 1961, Simplified methods for computing total sediment discharge with the modified Einstein procedure: U.S. Geol. Survey Water-Supply Paper 1593, 17 p.

Collins, W. D., and Howard, C. S., 1928, Quality of water of Colorado River in 1925-26: U.S. Geol. Survey Water-Supply Paper 596-B, p. 33-43.

Corbett, D. M., and others, 1943, Stream-gaging procedure, a manual describing methods and practices of the Geological Survey: U.S. Geol. Survey Water-Supply Paper 888, 245 p.

Goerlitz, D. F., and Brown, Eugene, 1972, Methods for analysis of organic substances in water: U.S. Geol. Survey Techniques of Water-Resources Inv., book 5, chap. A3, 40 p.

Goerlitz, D. F., and Lamar, W. L., 1967, Determination of phenoxy acid herbicides in water by electron-capture and microcoulemetric gas chromatography: U.S. Geol. Survey Water-Supply Paper 1817-C, 21 p.

Gregg, D. O., and others, 1961, Public water supplies of Colorado (1959-60): Fort Collins, Colorado State Univ. Agr. Expt. Sta., Gen. Ser. 757, 128 p.

Guy, H. P., 1970, Fluvial sediment concepts: U.S. Geol. Survey Techniques of Water-Resources Inv., book 3, chap. C1, 55 p.

_____1969, Laboratory theory and methods for sediment analysis: U.S. Geol. Survey Techniques of Water-Resources Inv., book 5, chap. C1, 57 p.

Guy, H. P., and Norman, V. W., 1970, Field methods for measurement of fluial sediment: U.S. Geol. Survey Techniques of Water-Resources Inv., book 3, chap. C2, 59 p.

Hem, John D., 1970, Study and interpretation of the chemical characteristics of natural water, 2d ed.: U.S. Geol. Survey Water-Supply Paper 1473, 363 p.

Howard, C. W., 1955, Quality of water of the Colorado River, 1925-40: U.S. Geol. Survey open-file report, 103 p.

Iorns, W. V., and others, 1964, Water resources of the Upper Colorado River Basin--basin data: U.S. Geol Survey Prof. Paper 442, 1,036 p., 4 pls., 1 fig.

_____1965, Water Resources of the Upper Colorado River Basin--technical report: U.S. Geol. Survey Prof. Paper 441, 370 p., 9 pls., 147 figs.

Lamar, W. L., Goerlitz, D. F., and Law, L. M., 1965, Identification and measurement of chlorinated organic pesticides in water by electron-capture gas chromatography: U.S. Geol. Survey Water-Supply Paper 1817-B, 12 p.

Lane, E. W., and others, 1947, Reports of Subcommittee on terminology: Am. Geophys. Union Trans., v. 28, p. 937.

Langbein, W. B., and Iseri, K. T., 1960, General introduction and hydrologic definitions: U.S. Geol. Survey Water-Supply Paper 1541-A, 29 p.

Lohman, S. W., and others, 1972, Definitions of selected ground-water terms--revisions and conceptual refinements: U.S. Geol. Survey Water-Supply Paper 1988, p. 2.

McGuinness, C. L., 1963, The role of ground water in the national water situation: U.S. Geol. Survey Water-Supply Paper 1800, 1121 p.

Meinzer, O. E., 1923, The occurrence of ground water in the United States: U.S. Geol. Survey Water-Supply Paper 489, 321 p.

_____1923, Outline of ground-water hydrology, with definitions: U.S. Geol. Survey Water-Supply Paper 494, 71 p.

Porterfield, George, 1972, Computations of fluvial-sediment discharge: U.S. Geol. Survey Techniques of Water-Resources Inv., book 3, chap. C3, 66 p.

Ritter, J. R., and Helley, E. J., 1969, Optical method for determining particle sizes of coarse sediment: U.S. Geol. Survey Techniques of Water-Resources Inv., book 5, chap. C3, 33 p. (Open-file)

Rose, Arthur, and Rose, Elizabeth (Gates), 1966, The condensed chemical dictionary: New York, Reinhold Pub. Corp., 7th ed., 1044 p.

Slack, K. V., and others, 1973, Methods for collection and analysis of aquatic biological and microbiological samples: U.S. Geol. Survey Techniques of Water-Resources Inv., book 5, chap. A4, 165 p.

Stabler, Herman, 1911, Some stream waters of the Western United States: U.S. Geol. Survey Water-Supply Paper 274, 188 p.

U.S. Inter-Agency Committee on Water Resources, A study of methods used in measurements and analysis of sediment loads in streams:

Report 11, 1957, The development and calibration of visual accumulation tube: St. Anthony Falls Hydraulic Lab., Minneapolis, Minn., 109 p. 43 figs.

Report 12, 1957, Some fundamentals of particle-size analysis: Washington, D. C., U.S. Govt. Printing Office, 55 p., 9 figs.

Report AA, 1959, Federal Inter-Agency sedimentation instruments and reports: St. Anthony Falls Hydraulic Lab., Minneapolis, Minn., 41 p., 27 figs.

Report 13, 1961, The single-stage sampler for suspended sediment: Washington, D. C., U.S. Govt. Printing Office, 105 p., 51 figs.

Report 14, 1963, Determinations of fluvial sediment discharge: Washington, D. C., U.S. Govt. Printing Office, 151 p., 70 figs.

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

Thirty-one manuals by the U.S. Geological Survey have been published to date in the series on techniques describing procedures for planning and executing specialized work in water-resources investigations. The material is grouped under major subject headings called books and is further divided into sections and chapters. For example, Section A of Book 3 (Applications of Hydraulics) is on surface water. The chapter, the unit of publications, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises. The reports listed below are for sale by the U.S. Geological Survey, Branch of Distribution, 604 South Picket Street, Alexandria, VA 22304 (authorized agent of the Superintendent of Documents, Government Printing Office).

NOTE: When ordering any of these publications, please give the title, book number, chapter number, and "U.S. Geological Survey Techniques of Water-Resources Investigations."

1-D1. Water temperature-influential factors, field measurement, and data presentation, by H. H. Stevens Jr., J. F. Ficke, and G. F. Smoot: USGS--TWRI Book 1, Chapter D1. 1975. 65 p. $1.60.

2-D1. Application of surface geophysics to ground-water investigations, by A. A. R. Zohdy, G. P. Eaton, and D. R. Mabey: USGS--TWRI Book 2, Chapter D1. 1974. 116 pages. $1.90.

2-E1. Application of borehole geophysics to water-resources investigations, by W. S. Keys and L. M. MacCary: USGS--TWRI Book 2, Chapter E1. 1971. 126 pages. $1.75.

3-A1. General field and office procedures for indirect discharge measurements, by M. A. Benson and Tate Dalrymple: USGS--TWRI Book 3, Chapter A1. 1967. 30 pages. $0.25.

3-A2. Measurement of peak discharge by the slope-area method, by Tate Dalrymple and M. A. Benson: USGS--TWRI Book 3, Chapter A2. 1967. 12 pages. $0.20.

3-A3. Measurement of peak discharge at culverts by indirect methods, by G. L. Bodhaine: USGS--TWRI Book 3, Chapter A3. 1968. 60 pages. $0.40.

3-A4. Measurement of peak discharge at width contractions by indirect methods, by H. F. Matthai: USGS--TWRI Book 3, Chapter A4. 1967. 44 pages. $1.00.

3-A5. Measurement of peak discharge at dams by indirect methods, by Harry Hulsing: USGS--TWRI Book 3, Chapter A5. 1967. 29 pages. $0.30.

3-A6. General procedure for gaging streams, by R. W. Carter and Jacob Davidian: USGS--TWRI Book 3, Chapter A6, 1968, 13 pages. $0.20.

3-A7. Stage measurements at gaging stations, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A7. 1968. 28 pages. $0.45.

3-A8. Discharge measurements at gaging stations, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A8. 1969. 65 pages. $1.25.

3-A11. Measurement of discharge by moving-boat method, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 3, Chapter A11. 1969. 22 pages. $0.40.

3-A12. Fluorometric procedures for dye tracing, by J. F. Wilson Jr.: USGS--TWRI Book 3, Chapter A12. 1968. 31 pages. $0.35. Not currently available.

3-B1. Aquifer-test design, observation, and data analysis, by R. W. Stallman: USGS--TWRI Boox 3, Chapter B1. 1971. 26 pages. $0.70.

3-B2. Introduction to ground-water hydraulics-a programed text for self-instruction, by G. S. Bennett: USGS--TWRI Book 3, Chapter B2. 1976. 172 pages.

3-C1. Fluvial sediment concepts, by H. P. Guy: USGS--TWRI Book 3, Chapter C1. 1970. 55 pages. $0.65.

3-C2. Field methods for measurement of fluvial sediment, by H. P. Guy and V. W. Norman: USGS--TWRI Book 3, Chapter C2, 1970. 59 pages. $0.70.

3-C3. Computation of fluvial-sediment discharge, by George Porterfield: USGS--TWRI Book 3, Chapter C3. 1972. 66 pages. $1.15.

4-A1. Some statistical tools in hydrology, By H. C. Riggs: USGS--TWRI Book 4 Chapter A1. 1968. 39 pages. $0.30.

4-A2. Frequency curves, by H. C. Riggs: USGS--TWRI Book 4, Chapter A2. 1968. 15 pages. $0.20.

4-B1. Low-flow investigations, by H. C. Riggs: USGS--TWRI Book 4, Chapter B1. 1972, 18 pages. $0.65.

4-B2. Storage analyses for water supply, by H. C. Riggs and C. H. Hardison: USGS--TWRI Book 4, Chapter B2. 1973. 20 pages. $0.75.

4-B3. Regional analyses of streamflow characteristics, by H. C. Riggs: USGS--TWRI Book 4, Chapter B3. 1973. 15 pages. $0.75.

4-D1. Computation of rate and volume of stream depletion by wells, by C. T. Jenkins: USGS--TWRI Book 4, Chapter D1. 1970. 17 pages. $0.65.

5-A1. Methods for collection and analysis of water samples for dissolved minerals and gases, by Eugene Brown, M. W. Skougstad, and M. J. Fishman: USGS--TWRI Book 5, Chapter A1. 1970. 160 pages. $2.40.

5-A2. Determination of minor elements in water by emission spectroscopy, by P. R. Barnett and E. C. Mallory, Jr.: USGS--TWRI Book 5, Chapter A2. 1971. 31 pages. $0.80.

5-A3. Methods for analysis of organic substances in water, by D. F. Goerlitz and Eugene Brown: USGS--TWRI Book 5, Chapter A3. 1972. 40 pages. $0.90.

5-A4. Methods for collection and analysis of aquatic biological and microbiological samples, by K. V. Slack, R. C. Averett, P. E. Greeson, and R. G. Lipscomb: USGS--TWRI Book 5, Chapter A4. 1973. 165 pages. $1.95.

5-C1. Laboratory theory and methods for sediment analysis, by H. P. Guy: USGS--TWRI Book 5, Chapter C1. 1969. 58 pages. $0.65.

7-C1. Finite-difference model for aquifer simulation in two dimensions with results of numerical experiments, by P. C. Trescott, G. F. Pinder, and S. P. Larson: USGS--TWRI Book 7, Chapter C1. 1976. 116 pages.

8-A1. Methods of measuring water levels in deep wells, by M. S. Garber and F. C. Koopman: USGS--TWRI Book 8, Chapter A1. 1968. 23 pages. $0.70.

8-B2. Calibration and maintenance of vertical-axis type current meters, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 8, Chapter B2. 1968. 15 pages. $0.40.

APPENDIX

NUMERIC LISTING

PARM. CODE	NEW TERMINOLOGY -- FIRST LINE OLD TERMINOLOGY -- SECOND LINE
00623	NITROGEN, AMMONIA PLUS ORGANIC, DISSOLVED (MG/L AS N)
00623	NITROGEN, KJELDAHL, DISSOLVED (MG/L AS N)
00624	NITROGEN, AMMONIA PLUS ORGANIC, SUSPENDED TOTAL (MG/L AS N)
00624	NITROGEN, KJELDAHL, SUSPENDED (MG/L AS N)
00625	NITROGEN, AMMONIA PLUS ORGANIC, TOTAL (MG/L AS N)
00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)
00626	NITROGEN, AMMONIA PLUS ORGANIC, TOTAL IN BOTTOM MATERIAL, DRY WT (MG/KG AS N)
00626	NITROGEN, KJELDAHL, TOTAL IN BOTTOM MATERIAL, DRY WT (MG/KG AS N)
00683	CARBON, ORGANIC, SUSPENDED TOTAL (MG/L AS C)
00683	CARBON, ORGANIC, SUSPENDED (MG/L AS C)
00688	CARBON, INORGANIC, SUSPENDED TOTAL (MG/L AS C)
00688	CARBON, INORGANIC, SUSPENDED (MG/L AS C)
00689	CARBON, ORGANIC, SUSPENDED TOTAL (MG/L AS C)
00689	CARBON, ORGANIC, SUSPENDED (MG/L AS C)
00694	CARBON, INORGANIC PLUS ORGANIC, SUSPENDED TOTAL (MG/L AS C)
00694	CARBON, INORGANIC PLUS ORGANIC, SUSPENDED (MG/L AS C)
00916	CALCIUM, TOTAL RECOVERABLE (MG/L AS CA)
00916	CALCIUM, TOTAL (MG/L AS CA)
00926	MAGNESIUM, SUSPENDED RECOVERABLE (MG/L AS MG)
00926	MAGNESIUM, SUSPENDED (MG/L AS MG)
00927	MAGNESIUM, TOTAL RECOVERABLE (MG/L AS MG)
00927	MAGNESIUM, TOTAL (MG/L AS MG)
01001	ARSENIC, SUSPENDED TOTAL (UG/L AS AS)
01001	ARSENIC, SUSPENDED (UG/L AS AS)
01006	BARIUM, SUSPENDED RECOVERABLE (UG/L AS BA)
01006	BARIUM, SUSPENDED (UG/L AS BA)
01007	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)
01007	BARIUM, TOTAL (UG/L AS BA)
01008	BARIUM, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS BA)
01008	BARIUM, TOTAL IN BOTTOM MATERIAL (UG/G AS BA)
01011	BERYLLIUM, SUSPENDED RECOVERABLE (UG/L AS BE)
01011	BERYLLIUM, SUSPENDED (UG/L AS BE)
01012	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)
01012	BERYLLIUM, TOTAL (UG/L AS BE)
01013	BERYLLIUM, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS BE)
01013	BERYLLIUM, TOTAL IN BOTTOM MATERIAL (UG/G AS BE)

NUMERIC LISTING--CONTINUED

PARM. CODE	NEW TERMINOLOGY -- FIRST LINE OLD TERMINOLOGY -- SECOND LINE
01016	BISMUTH, SUSPENDED TOTAL (UG/L AS BI)
01016	BISMUTH, SUSPENDED (UG/L AS BI)
01021	BORON, SUSPENDED RECOVERABLE (UG/L AS B)
01021	BORON, SUSPENDED (UG/L AS B)
01022	BORON, TOTAL RECOVERABLE (UG/L AS B)
01022	BORON, TOTAL (UG/L AS B)
01023	BORON, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS B)
01023	BORON, TOTAL IN BOTTOM MATERIAL (UG/G AS B)
01026	CADMIUM, SUSPENDED RECOVERABLE (UG/L AS CD)
01026	CADMIUM, SUSPENDED (UG/L AS CD)
01027	CADMIUM, TOTAL RECOVERABLE (UG/L AS CD)
01027	CADMIUM, TOTAL (UG/L AS CD)
01028	CADMIUM, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS CD)
01028	CADMIUM, TOTAL IN BOTTOM MATERIAL (UG/G AS CD)
01029	CHROMIUM, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS CR)
01029	CHROMIUM, TOTAL IN BOTTOM MATERIAL (UG/G AS CR)
01031	CHROMIUM, SUSPENDED RECOVERABLE (UG/L AS CR)
01031	CHROMIUM, SUSPENDED (UG/L AS CR)
01034	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)
01034	CHROMIUM, TOTAL (UG/L AS CR)
01036	COBALT, SUSPENDED RECOVERABLE (UG/L AS CO)
01036	COBALT, SUSPENDED (UG/L AS CO)
01037	COBALT, TOTAL RECOVERABLE (UG/L AS CO)
01037	COBALT, TOTAL (UG/L AS CO)
01038	COBALT, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS CO)
01038	COBALT, TOTAL IN BOTTOM MATERIAL (UG/G AS CO)
01041	COPPER, SUSPENDED RECOVERABLE (UG/L AS CU)
01041	COPPER, SUSPENDED (UG/L AS CU)
01042	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
01042	COPPER, TOTAL (UG/L AS CU)
01043	COPPER, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS CU)
01043	COPPER, TOTAL IN BOTTOM MATERIAL (UG/G AS CU)
01044	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)
01044	IRON, SUSPENDED (UG/L AS FE)
01045	IRON, TOTAL RECOVERABLE (UG/L AS FE)
01045	IRON, TOTAL (UG/L AS FE)

NUMERIC LISTING--CONTINUED

PARM. CODE	NEW TERMINOLOGY -- FIRST LINE OLD TERMINOLOGY -- SECOND LINE
01050	LEAD, SUSPENDED RECOVERABLE (UG/L AS PB)
01050	LEAD, SUSPENDED (UG/L AS PB)
01051	LEAD, TOTAL RECOVERABLE (UG/L AS PB)
01051	LEAD, TOTAL (UG/L AS PB)
01052	LEAD, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS PB)
01052	LEAD, TOTAL IN BOTTOM MATERIAL (UG/G AS PB)
01053	MANGANESE, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS MN)
01053	MANGANESE, TOTAL IN BOTTOM MATERIAL (UG/G AS MN)
01054	MANGANESE, SUSPENDED RECOVERABLE (UG/L AS MN)
01054	MANGANESE, SUSPENDED (UG/L AS MN)
01055	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
01055	MANGANESE, TOTAL (UG/L AS MN)
01061	MOLYBDENUM, SUSPENDED RECOVERABLE (UG/L AS MO)
01061	MOLYBDENUM, SUSPENDED (UG/L AS MO)
01062	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)
01062	MOLYBDENUM, TOTAL (UG/L AS MO)
01063	MOLYBDENUM, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS MO)
01063	MOLYBDENUM, TOTAL IN BOTTOM MATERIAL (UG/G AS MO)
01066	NICKEL, SUSPENDED RECOVERABLE (UG/L AS NI)
01066	NICKEL, SUSPENDED (UG/L AS NI)
01067	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)
01067	NICKEL, TOTAL (UG/L AS NI)
01068	NICKEL, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS NI)
01068	NICKEL, TOTAL IN BOTTOM MATERIAL (UG/G AS NI)
01076	SILVER, SUSPENDED RECOVERABLE (UG/L AS AG)
01076	SILVER, SUSPENDED (UG/L AS AG)
01077	SILVER, TOTAL RECOVERABLE (UG/L AS AG)
01077	SILVER, TOTAL (UG/L AS AG)
01078	SILVER, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS AG)
01078	SILVER, TOTAL IN BOTTOM MATERIAL (UG/G AS AG)
01081	STRONTIUM, SUSPENDED RECOVERABLE (UG/L AS SR)
01081	STRONTIUM, SUSPENDED (UG/L AS SR)
01082	STRONTIUM, TOTAL RECOVERABLE (UG/L AS SR)
01082	STRONTIUM, TOTAL (UG/L AS SR)
01083	STRONTIUM, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS SR)
01083	STRONTIUM, TOTAL IN BOTTOM MATERIAL (UG/G AS SR)

PARM. CODE	NEW TERMINOLOGY -- FIRST LINE OLD TERMINOLOGY -- SECOND LINE
01086	VANADIUM, SUSPENDED TOTAL (UG/L AS V)
01086	VANADIUM, SUSPENDED (UG/L AS V)
01091	ZINC, SUSPENDED RECOVERABLE (UG/L AS ZN)
01091	ZINC, SUSPENDED (UG/L AS ZN)
01092	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)
01092	ZINC, TOTAL (UG/L AS ZN)
01093	ZINC, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS ZN)
01093	ZINC, TOTAL IN BOTTOM MATERIAL (UG/G AS ZN)
01096	ANTIMONY, SUSPENDED TOTAL (UG/L AS SB)
01096	ANTIMONY, SUSPENDED (UG/L AS SB)
01101	TIN, SUSPENDED RECOVERABLE (UG/L AS SN)
01101	TIN, SUSPENDED (UG/L AS SN)
01102	TIN, TOTAL RECOVERABLE (UG/L AS SN)
01102	TIN, TOTAL (UG/L AS SN)
01105	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)
01105	ALUMINUM, TOTAL (UG/L AS AL)
01107	ALUMINUM, SUSPENDED RECOVERABLE (UG/L AS AL)
01107	ALUMINUM, SUSPENDED (UG/L AS AL)
01108	ALUMINUM, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS AL)
01108	ALUMINUM, TOTAL IN BOTTOM MATERIAL (UG/G AS AL)
01116	CESIUM, SUSPENDED TOTAL (UG/L AS CS)
01116	CESIUM, SUSPENDED (UG/L AS CS)
01121	GALLIUM, SUSPENDED TOTAL (UG/L AS GA)
01121	GALLIUM, SUSPENDED (UG/L AS GA)
01126	GERMANIUM, SUSPENDED TOTAL (UG/L AS GE)
01126	GERMANIUM, SUSPENDED (UG/L AS GE)
01131	LITHIUM, SUSPENDED RECOVERABLE (UG/L AS LI)
01131	LITHIUM, SUSPENDED (UG/L AS LI)
01132	LITHIUM, TOTAL RECOVERABLE (UG/L AS LI)
01132	LITHIUM, TOTAL (UG/L AS LI)
01136	RUBIDIUM, SUSPENDED TOTAL (UG/L AS RB)
01136	RUBIDIUM, SUSPENDED (UG/L AS RB)
01146	SELENIUM, SUSPENDED TOTAL (UG/L AS SE)
01146	SELENIUM, SUSPENDED (UG/L AS SE)
01151	TITANIUM, SUSPENDED TOTAL (UG/L AS TI)
01151	TITANIUM, SUSPENDED (UG/L AS TI)

NUMERIC LISTING--CONTINUED

PARM. CODE	NEW TERMINOLOGY -- FIRST LINE OLD TERMINOLOGY -- SECOND LINE
01161	ZIRCONIUM, SUSPENDED TOTAL (UG/L AS ZR)
01161	ZIRCONIUM, SUSPENDED (UG/L AS ZR)
01170	IRON, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS FE)
01170	IRON, TOTAL IN BOTTOM MATERIAL (UG/G AS FE)
01505	ALPHA, SUSPENDED TOTAL (PCI/L)
01505	ALPHA, SUSPENDED (PCI/L)
01506	ALPHA, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
01506	ALPHA, SUSPENDED, COUNTING ERROR (PCI/L)
01516	GROSS ALPHA RADIOACTIVITY, SUSPENDED TOTAL (PCI/L AS U NATURAL)
01516	GROSS ALPHA RADIOACTIVITY, SUSPENDED (PCI/L AS U NATURAL)
01517	GROSS ALPHA RADIOACTIVITY, SUSPENDED TOTAL (PCI/G AS U NATURAL)
01517	GROSS ALPHA RADIOACTIVITY, SUSPENDED (PCI/G AS U NATURAL)
01518	GROSS ALPHA RADIOACTIVITY, SUSPENDED TOTAL (UG/G AS U NATURAL)
01518	GROSS ALPHA RADIOACTIVITY, SUSPENDED (UG/G AS U NATURAL)
03505	BETA, SUSPENDED TOTAL (PCI/L)
03505	BETA, SUSPENDED (PCI/L)
03506	BETA, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
03506	BETA, SUSPENDED, COUNTING ERROR (PCI/L)
03516	GROSS BETA RADIOACTIVITY, SUSPENDED TOTAL (PCI/L AS CS-137)
03516	GROSS BETA RADIOACTIVITY, SUSPENDED (PCI/L AS CS-137)
03517	GROSS BETA RADIOACTIVITY, SUSPENDED TOTAL (PCI/G AS SR/YT-90)
03517	GROSS BETA RADIOACTIVITY, SUSPENDED (PCI/G AS SR/YT-90)
03518	GROSS BETA RADIOACTIVITY, SUSPENDED TOTAL (PCI/G AS CS-137)
03518	GROSS BETA RADIOACTIVITY, SUSPENDED (PCI/G AS CS-137)
07010	TRITIUM, SUSPENDED TOTAL (PCI/L)
07010	TRITIUM, SUSPENDED (PCI/L)
07011	TRITIUM, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
07011	TRITIUM, SUSPENDED, COUNTING ERROR (PCI/L)

NUMERIC LISTING--CONTINUED

PARM. CODE	NEW TERMINOLOGY -- FIRST LINE OLD TERMINOLOGY -- SECOND LINE
07014	TRITIUM, SUSPENDED TOTAL, COUNTING ERROR (TRITIUM UNITS)
07014	TRITIUM, SUSPENDED, COUNTING ERROR (TRITIUM UNITS)
07016	TRITIUM, SUSPENDED TOTAL (TRITIUM UNITS)
07016	TRITIUM, SUSPENDED (TRITIUM UNITS)
07052	CALCIUM 45, SUSPENDED TOTAL (PCI/L)
07052	CALCIUM 45, SUSPENDED (PCI/L)
07053	CALCIUM 45, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
07053	CALCIUM 45, SUSPENDED, COUNTING ERROR (PCI/L)
07062	IRON 59, SUSPENDED TOTAL (PCI/L)
07062	IRON 59, SUSPENDED (PCI/L)
07063	IRON 59, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
07063	IRON 59, SUSPENDED, COUNTING ERROR (PCI/L)
07082	RHODAMINE WT, SUSPENDED TOTAL (UG/L)
07082	RHODAMINE WT, SUSPENDED (UG/L)
07102	SELENIUM 75, SUSPENDED TOTAL (PCI/L)
07102	SELENIUM 75, SUSPENDED (PCI/L)
07103	SELENIUM 75, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
07103	SELENIUM 75, SUSPENDED, COUNTING ERROR (PCI/L)
07122	SILVER 110, SUSPENDED TOTAL (PCI/L)
07122	SILVER 110, SUSPENDED (PCI/L)
07123	SILVER 110, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
07123	SILVER 110, SUSPENDED, COUNTING ERROR (PCI/L)
07142	SULFUR 35, SUSPENDED TOTAL (PCI/L)
07142	SULFUR 35, SUSPENDED (PCI/L)
07143	SULFUR 35, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
07143	SULFUR 35, SUSPENDED, COUNTING ERROR (PCI/L)
09505	RADIUM 226, SUSPENDED TOTAL (PCI/L)
09505	RADIUM 226, SUSPENDED (PCI/L)
13505	STRONTIUM 90, SUSPENDED TOTAL (PCI/L)
13505	STRONTIUM 90, SUSPENDED (PCI/L)
13506	STRONTIUM 90, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
13506	STRONTIUM 90, SUSPENDED, COUNTING ERROR (PCI/L)
22705	URANIUM, NATURAL, SUSPENDED TOTAL (UG/L AS U NATURAL)
22705	URANIUM, NATURAL, SUSPENDED (UG/L AS U NATURAL)
28404	CESIUM 137, SUSPENDED TOTAL (PCI/L)
28404	CESIUM 137, SUSPENDED (PCI/L)

NUMERIC LISTING--CONTINUED

PARM. CODE	NEW TERMINOLOGY -- FIRST LINE OLD TERMINOLOGY -- SECOND LINE
28405	CESIUM 137,SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
28405	CESIUM 137,SUSPENDED, COUNTING ERROR (PCI/L)
28412	CESIUM 134, SUSPENDED TOTAL (PCI/L)
28412	CESIUM 134, SUSPENDED (PCI/L)
28413	CESIUM 134, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
28413	CESIUM 134, SUSPENDED, COUNTING ERROR (PCI/L)
29633	SCANDIUM 46, SUSPENDED TOTAL (PCI/L)
29633	SCANDIUM 46, SUSPENDED (PCI/L)
29634	SCANDIUM 46, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
29634	SCANDIUM 46, SUSPENDED, COUNTING ERROR (PCI/L)
39332	ALDRIN, SUSPENDED TOTAL (UG/L)
39332	ALDRIN, SUSPENDED (UG/L)
39342	LINDANE, SUSPENDED TOTAL (UG/L)
39342	LINDANE, SUSPENDED (UG/L)
39353	CHLORDANE, SUSPENDED TOTAL (UG/L)
39353	CHLORDANE, SUSPENDED (UG/L)
39362	DDD, SUSPENDED TOTAL (UG/L)
39362	DDD, SUSPENDED (UG/L)
39367	DDE, SUSPENDED TOTAL (UG/L)
39367	DDE, SUSPENDED (UG/L)
39372	DDT, SUSPENDED TOTAL (UG/L)
39372	DDT, SUSPENDED (UG/L)
39382	DIELDRIN, SUSPENDED TOTAL (UG/L)
39382	DIELDRIN, SUSPENDED (UG/L)
39392	ENDRIN, SUSPENDED TOTAL (UG/L)
39392	ENDRIN, SUSPENDED (UG/L)
39402	TOXAPHENE, SUSPENDED TOTAL (UG/L)
39402	TOXAPHENE, SUSPENDED (UG/L)
39412	HEPTACHLOR, SUSPENDED TOTAL (UG/L)
39412	HEPTACHLOR, SUSPENDED (UG/L)
39422	HEPTACHLOR EPOXIDE, SUSPENDED TOTAL (UG/L)
39422	HEPTACHLOR EPOXIDE, SUSPENDED (UG/L)
39432	ISODRIN, SUSPENDED TOTAL (UG/L)
39432	ISODRIN, SUSPENDED (UG/L)
39502	AROCLOR, SUSPENDED TOTAL, 1248 PCB SERIES (UG/L)
39502	AROCLOR, SUSPENDED, 1248 PCB SERIES (UG/L)

NUMERIC LISTING--CONTINUED

PARM. CODE	NEW TERMINOLOGY -- FIRST LINE OLD TERMINOLOGY -- SECOND LINE
39506	AROCLOR, SUSPENDED TOTAL, 1254 PCB SERIES (UG/L)
39506	AROCLOR, SUSPENDED, 1254 PCB SERIES (UG/L)
39510	AROCLOR, SUSPENDED TOTAL, 1260 PCB SERIES (UG/L)
39510	AROCLOR, SUSPENDED, 1260 PCB SERIES (UG/L)
39518	PCB, SUSPENDED TOTAL (UG/L)
39518	PCB, SUSPENDED (UG/L)
39533	MALATHION, SUSPENDED TOTAL (UG/L)
39533	MALATHION, SUSPENDED (UG/L)
39543	PARATHION, SUSPENDED TOTAL (UG/L)
39543	PARATHION, SUSPENDED (UG/L)
39573	DIAZINON, SUSPENDED TOTAL (UG/L)
39573	DIAZINON, SUSPENDED (UG/L)
39603	METHYL PARATHION, SUSPENDED TOTAL (UG/L)
39603	METHYL PARATHION, SUSPENDED (UG/L)
39733	2,4-D, SUSPENDED TOTAL (UG/L)
39733	2,4-D, SUSPENDED (UG/L)
39743	2,4,5-T, SUSPENDED TOTAL (UG/L)
39743	2,4,5-T, SUSPENDED (UG/L)
39757	MIREX, SUSPENDED TOTAL (UG/L)
39757	MIREX, SUSPENDED (UG/L)
39763	SILVEX, SUSPENDED TOTAL (UG/L)
39763	SILVEX, SUSPENDED (UG/L)
70299	SOLIDS, RESIDUE AT 110 DEG. C, SUSPENDED TOTAL (MG/L)
70299	SOLIDS, RESIDUE AT 110 DEG. C, SUSPENDED (MG/L)
71895	MERCURY, SUSPENDED RECOVERABLE (UG/L AS HG)
71895	MERCURY, SUSPENDED (UG/L AS HG)
71900	MERCURY, TOTAL RECOVERABLE (UG/L AS HG)
71900	MERCURY, TOTAL (UG/L AS HG)
71921	MERCURY, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS HG)
71921	MERCURY, TOTAL IN BOTTOM MATERIAL (UG/G AS HG)
80040	GROSS ALPHA RADIOACTIVITY, SUSPENDED TOTAL (UG/L AS U NATURAL)
80040	GROSS ALPHA RADIOACTIVITY, SUSPENDED (UG/L AS U NATURAL)
80060	GROSS BETA RADIOACTIVITY, SUSPENDED TOTAL (PCI/L AS SR/YT-90)
80060	GROSS BETA RADIOACTIVITY, SUSPENDED (PCI/L AS SR/YT-90)

TABLE OF REVISED WATER-QUALITY PARAMETER CODES--CONTINUED

ALPHABETIC LISTING

PARM. CODE	NEW TERMINOLOGY -- FIRST LINE OLD TERMINOLOGY -- SECOND LINE
39332	ALDRIN, SUSPENDED TOTAL (UG/L)
39332	ALDRIN, SUSPENDED (UG/L)
01505	ALPHA, SUSPENDED TOTAL (PCI/L)
01505	ALPHA, SUSPENDED (PCI/L)
01506	ALPHA, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
01506	ALPHA, SUSPENDED, COUNTING ERROR (PCI/L)
01105	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)
01105	ALUMINUM, TOTAL (UG/L AS AL)
01107	ALUMINUM, SUSPENDED RECOVERABLE (UG/L AS AL)
01107	ALUMINUM, SUSPENDED (UG/L AS AL)
01108	ALUMINUM, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS AL)
01108	ALUMINUM, TOTAL IN BOTTOM MATERIAL (UG/G AS AL)
01096	ANTIMONY, SUSPENDED TOTAL (UG/L AS SB)
01096	ANTIMONY, SUSPENDED (UG/L AS SB)
39502	AROCLOR, SUSPENDED TOTAL, 1248 PCB SERIES (UG/L)
39502	AROCLOR, SUSPENDED, 1248 PCB SERIES (UG/L)
39506	AROCLOR, SUSPENDED TOTAL, 1254 PCB SERIES (UG/L)
39506	AROCLOR, SUSPENDED, 1254 PCB SERIES (UG/L)
39510	AROCLOR, SUSPENDED TOTAL, 1260 PCB SERIES (UG/L)
39510	AROCLOR, SUSPENDED, 1260 PCB SERIES (UG/L)
01001	ARSENIC, SUSPENDED TOTAL (UG/L AS AS)
01001	ARSENIC, SUSPENDED (UG/L AS AS)
01006	BARIUM, SUSPENDED RECOVERABLE (UG/L AS BA)
01006	BARIUM, SUSPENDED (UG/L AS BA)
01007	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)
01007	BARIUM, TOTAL (UG/L AS BA)
01008	BARIUM, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS BA)
01008	BARIUM, TOTAL IN BOTTOM MATERIAL (UG/G AS BA)
01011	BERYLLIUM, SUSPENDED RECOVERABLE (UG/L AS BE)
01011	BERYLLIUM, SUSPENDED (UG/L AS BE)
01012	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)
01012	BERYLLIUM, TOTAL (UG/L AS BE)
01013	BERYLLIUM, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS BE)
01013	BERYLLIUM, TOTAL IN BOTTOM MATERIAL (UG/G AS BE)

ALPHABETIC LISTING--CONTINUED

PARM. CODE	NEW TERMINOLOGY -- FIRST LINE OLD TERMINOLOGY -- SECOND LINE
03505	BETA, SUSPENDED TOTAL (PCI/L)
03505	BETA, SUSPENDED (PCI/L)
03506	BETA, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
03506	BETA, SUSPENDED, COUNTING ERROR (PCI/L)
01016	BISMUTH, SUSPENDED TOTAL (UG/L AS BI)
01016	BISMUTH, SUSPENDED (UG/L AS BI)
01021	BORON, SUSPENDED RECOVERABLE (UG/L AS B)
01021	BORON, SUSPENDED (UG/L AS B)
01022	BORON, TOTAL RECOVERABLE (UG/L AS B)
01022	BORON, TOTAL (UG/L AS B)
01023	BORON, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS B)
01023	BORON, TOTAL IN BOTTOM MATERIAL (UG/G AS B)
01026	CADMIUM, SUSPENDED RECOVERABLE (UG/L AS CD)
01026	CADMIUM, SUSPENDED (UG/L AS CD)
01027	CADMIUM, TOTAL RECOVERABLE (UG/L AS CD)
01027	CADMIUM, TOTAL (UG/L AS CD)
01028	CADMIUM, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS CD)
01028	CADMIUM, TOTAL IN BOTTOM MATERIAL (UG/G AS CD)
00916	CALCIUM, TOTAL RECOVERABLE (MG/L AS CA)
00916	CALCIUM, TOTAL (MG/L AS CA)
07052	CALCIUM 45, SUSPENDED TOTAL (PCI/L)
07052	CALCIUM 45, SUSPENDED (PCI/L)
07053	CALCIUM 45, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
07053	CALCIUM 45, SUSPENDED, COUNTING ERROR (PCI/L)
00683	CARBON, ORGANIC, SUSPENDED TOTAL (MG/L AS C)
00683	CARBON, ORGANIC, SUSPENDED (MG/L AS C)
00688	CARBON, INORGANIC, SUSPENDED TOTAL (MG/L AS C)
00688	CARBON, INORGANIC, SUSPENDED (MG/L AS C)
00689	CARBON, ORGANIC, SUSPENDED TOTAL (MG/L AS C)
00689	CARBON, ORGANIC, SUSPENDED (MG/L AS C)
00694	CARBON, INORGANIC PLUS ORGANIC, SUSPENDED TOTAL (MG/L AS C)
00694	CARBON, INORGANIC PLUS ORGANIC, SUSPENDED (MG/L AS C)
01116	CESIUM, SUSPENDED TOTAL (UG/L AS CS)
01116	CESIUM, SUSPENDED (UG/L AS CS)
28404	CESIUM 137, SUSPENDED TOTAL (PCI/L)
28404	CESIUM 137, SUSPENDED (PCI/L)

ALPHABETIC LISTING--CONTINUED

PARM. CODE	NEW TERMINOLOGY -- FIRST LINE OLD TERMINOLOGY -- SECOND LINE
28405	CESIUM 137,SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
28405	CESIUM 137,SUSPENDED, COUNTING ERROR (PCI/L)
28412	CESIUM 134, SUSPENDED TOTAL (PCI/L)
28412	CESIUM 134, SUSPENDED (PCI/L)
28413	CESIUM 134, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
28413	CESIUM 134, SUSPENDED, COUNTING ERROR (PCI/L)
39353	CHLORDANE, SUSPENDED TOTAL (UG/L)
39353	CHLORDANE, SUSPENDED (UG/L)
01029	CHROMIUM, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS CR)
01029	CHROMIUM, TOTAL IN BOTTOM MATERIAL (UG/G AS CR)
01031	CHROMIUM, SUSPENDED RECOVERABLE (UG/L AS CR)
01031	CHROMIUM, SUSPENDED (UG/L AS CR)
01034	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)
01034	CHROMIUM, TOTAL (UG/L AS CR)
01036	COBALT, SUSPENDED RECOVERABLE (UG/L AS CO)
01036	COBALT, SUSPENDED (UG/L AS CO)
01037	COBALT, TOTAL RECOVERABLE (UG/L AS CO)
01037	COBALT, TOTAL (UG/L AS CO)
01038	COBALT, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS CO)
01038	COBALT, TOTAL IN BOTTOM MATERIAL (UG/G AS CO)
01041	COPPER, SUSPENDED RECOVERABLE (UG/L AS CU)
01041	COPPER, SUSPENDED (UG/L AS CU)
01042	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
01042	COPPER, TOTAL (UG/L AS CU)
01043	COPPER, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS CU)
01043	COPPER, TOTAL IN BOTTOM MATERIAL (UG/G AS CU)
39362	DDD, SUSPENDED TOTAL (UG/L)
39362	DDD, SUSPENDED (UG/L)
39367	DDE, SUSPENDED TOTAL (UG/L)
39367	DDE, SUSPENDED (UG/L)
39372	DDT, SUSPENDED TOTAL (UG/L)
39372	DDT, SUSPENDED (UG/L)
39573	DIAZINON, SUSPENDED TOTAL (UG/L)
39573	DIAZINON, SUSPENDED (UG/L)
39382	DIELDRIN, SUSPENDED TOTAL (UG/L)
39382	DIELDRIN, SUSPENDED (UG/L)

ALPHABETIC LISTING--CONTINUED

PARM. CODE	NEW TERMINOLOGY -- FIRST LINE OLD TERMINOLOGY -- SECOND LINE
39392	ENDRIN, SUSPENDED TOTAL (UG/L)
39392	ENDRIN, SUSPENDED (UG/L)
01121	GALLIUM, SUSPENDED TOTAL (UG/L AS GA)
01121	GALLIUM, SUSPENDED (UG/L AS GA)
01126	GERMANIUM, SUSPENDED TOTAL (UG/L AS GE)
01126	GERMANIUM, SUSPENDED (UG/L AS GE)
01516	GROSS ALPHA RADIOACTIVITY, SUSPENDED TOTAL (PCI/L AS U NATURAL)
01516	GROSS ALPHA RADIOACTIVITY, SUSPENDED (PCI/L AS U NATURAL)
01517	GROSS ALPHA RADIOACTIVITY, SUSPENDED TOTAL (PCI/G AS U NATURAL)
01517	GROSS ALPHA RADIOACTIVITY, SUSPENDED (PCI/G AS U NATURAL)
01518	GROSS ALPHA RADIOACTIVITY, SUSPENDED TOTAL (UG/G AS U NATURAL)
01518	GROSS ALPHA RADIOACTIVITY, SUSPENDED (UG/G AS U NATURAL)
80040	GROSS ALPHA RADIOACTIVITY, SUSPENDED TOTAL (UG/L AS U NATURAL)
80040	GROSS ALPHA RADIOACTIVITY, SUSPENDED (UG/L AS U NATURAL)
80060	GROSS BETA RADIOACTIVITY, SUSPENDED TOTAL (PCI/L AS SR/YT-90)
80060	GROSS BETA RADIOACTIVITY, SUSPENDED (PCI/L AS SR/YT-90)
03516	GROSS BETA RADIOACTIVITY, SUSPENDED TOTAL (PCI/L AS CS-137)
03516	GROSS BETA RADIOACTIVITY, SUSPENDED (PCI/L AS CS-137)
03517	GROSS BETA RADIOACTIVITY, SUSPENDED TOTAL (PCI/G AS SR/YT-90)
03517	GROSS BETA RADIOACTIVITY, SUSPENDED (PCI/G AS SR/YT-90)
03518	GROSS BETA RADIOACTIVITY, SUSPENDED TOTAL (PCI/G AS CS-137)
03518	GROSS BETA RADIOACTIVITY, SUSPENDED (PCI/G AS CS-137)
39412	HEPTACHLOR, SUSPENDED TOTAL (UG/L)
39412	HEPTACHLOR, SUSPENDED (UG/L)
39422	HEPTACHLOR EPOXIDE, SUSPENDED TOTAL (UG/L)
39422	HEPTACHLOR EPOXIDE, SUSPENDED (UG/L)

ALPHABETIC LISTING--CONTINUED

PARM. CODE	NEW TERMINOLOGY -- FIRST LINE OLD TERMINOLOGY -- SECOND LINE
01044	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)
01044	IRON, SUSPENDED (UG/L AS FE)
01045	IRON, TOTAL RECOVERABLE (UG/L AS FE)
01045	IRON, TOTAL (UG/L AS FE)
01170	IRON, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS FE)
01170	IRON, TOTAL IN BOTTOM MATERIAL (UG/G AS FE)
07062	IRON 59, SUSPENDED TOTAL (PCI/L)
07062	IRON 59, SUSPENDED (PCI/L)
07063	IRON 59, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
07063	IRON 59, SUSPENDED, COUNTING ERROR (PCI/L)
39432	ISODRIN, SUSPENDED TOTAL (UG/L)
39432	ISODRIN, SUSPENDED (UG/L)
01050	LEAD, SUSPENDED RECOVERABLE (UG/L AS PB)
01050	LEAD, SUSPENDED (UG/L AS PB)
01051	LEAD, TOTAL RECOVERABLE (UG/L AS PB)
01051	LEAD, TOTAL (UG/L AS PB)
01052	LEAD, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS PB)
01052	LEAD, TOTAL IN BOTTOM MATERIAL (UG/G AS PB)
39342	LINDANE, SUSPENDED TOTAL (UG/L)
39342	LINDANE, SUSPENDED (UG/L)
01131	LITHIUM, SUSPENDED RECOVERABLE (UG/L AS LI)
01131	LITHIUM, SUSPENDED (UG/L AS LI)
01132	LITHIUM, TOTAL RECOVERABLE (UG/L AS LI)
01132	LITHIUM, TOTAL (UG/L AS LI)
00926	MAGNESIUM, SUSPENDED RECOVERABLE (MG/L AS MG)
00926	MAGNESIUM, SUSPENDED (MG/L AS MG)
00927	MAGNESIUM, TOTAL RECOVERABLE (MG/L AS MG)
00927	MAGNESIUM, TOTAL (MG/L AS MG)
39533	MALATHION, SUSPENDED TOTAL (UG/L)
39533	MALATHION, SUSPENDED (UG/L)
01053	MANGANESE, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS MN)
01053	MANGANESE, TOTAL IN BOTTOM MATERIAL (UG/G AS MN)
01054	MANGANESE, SUSPENDED RECOVERABLE (UG/L AS MN)
01054	MANGANESE, SUSPENDED (UG/L AS MN)
01055	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
01055	MANGANESE, TOTAL (UG/L AS MN)

PARM. CODE	NEW TERMINOLOGY -- FIRST LINE OLD TERMINOLOGY -- SECOND LINE
71895	MERCURY, SUSPENDED RECOVERABLE (UG/L AS HG)
71895	MERCURY, SUSPENDED (UG/L AS HG)
71900	MERCURY, TOTAL RECOVERABLE (UG/L AS HG)
71900	MERCURY, TOTAL (UG/L AS HG)
71921	MERCURY, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS HG)
71921	MERCURY, TOTAL IN BOTTOM MATERIAL (UG/G AS HG)
39603	METHYL PARATHION, SUSPENDED TOTAL (UG/L)
39603	METHYL PARATHION, SUSPENDED (UG/L)
39757	MIREX, SUSPENDED TOTAL (UG/L)
39757	MIREX, SUSPENDED (UG/L)
01061	MOLYBDENUM, SUSPENDED RECOVERABLE (UG/L AS MO)
01061	MOLYBDENUM, SUSPENDED (UG/L AS MO)
01062	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)
01062	MOLYBDENUM, TOTAL (UG/L AS MO)
01063	MOLYBDENUM, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS MO)
01063	MOLYBDENUM, TOTAL IN BOTTOM MATERIAL (UG/G AS MO)
01066	NICKEL, SUSPENDED RECOVERABLE (UG/L AS NI)
01066	NICKEL, SUSPENDED (UG/L AS NI)
01067	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)
01067	NICKEL, TOTAL (UG/L AS NI)
01068	NICKEL, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS NI)
01068	NICKEL, TOTAL IN BOTTOM MATERIAL (UG/G AS NI)
00623	NITROGEN, AMMONIA PLUS ORGANIC, DISSOLVED (MG/L AS N)
00623	NITROGEN, KJELDAHL, DISSOLVED (MG/L AS N)
00624	NITROGEN, AMMONIA PLUS ORGANIC, SUSPENDED TOTAL (MG/L AS N)
00624	NITROGEN, KJELDAHL, SUSPENDED (MG/L AS N)
00625	NITROGEN, AMMONIA PLUS ORGANIC, TOTAL (MG/L AS N)
00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)
00626	NITROGEN, AMMONIA PLUS ORGANIC, TOTAL IN BOTTOM MATERIAL, DRY WT (MG/KG AS N)
00626	NITROGEN, KJELDAHL, TOTAL IN BOTTOM MATERIAL, DRY WT (MG/KG AS N)
39543	PARATHION, SUSPENDED TOTAL (UG/L)
39543	PARATHION, SUSPENDED (UG/L)
39518	PCB, SUSPENDED TOTAL (UG/L)
39518	PCB, SUSPENDED (UG/L)
09505	RADIUM 226, SUSPENDED TOTAL (PCI/L)
09505	RADIUM 226, SUSPENDED (PCI/L)

ALPHABETIC LISTING--CONTINUED

PARM. CODE	NEW TERMINOLOGY -- FIRST LINE OLD TERMINOLOGY -- SECOND LINE
07082	RHODAMINE WT, SUSPENDED TOTAL (UG/L)
07082	RHODAMINE WT, SUSPENDED (UG/L)
01136	RUBIDIUM, SUSPENDED TOTAL (UG/L AS RB)
01136	RUBIDIUM, SUSPENDED (UG/L AS RB)
29633	SCANDIUM 46, SUSPENDED TOTAL (PCI/L)
29633	SCANDIUM 46, SUSPENDED (PCI/L)
29634	SCANDIUM 46, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
29634	SCANDIUM 46, SUSPENDED, COUNTING ERROR (PCI/L)
01146	SELENIUM, SUSPENDED TOTAL (UG/L AS SE)
01146	SELENIUM, SUSPENDED (UG/L AS SE)
07102	SELENIUM 75, SUSPENDED TOTAL (PCI/L)
07102	SELENIUM 75, SUSPENDED (PCI/L)
07103	SELENIUM 75, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
07103	SELENIUM 75, SUSPENDED, COUNTING ERROR (PCI/L)
01076	SILVER, SUSPENDED RECOVERABLE (UG/L AS AG)
01076	SILVER, SUSPENDED (UG/L AS AG)
01077	SILVER, TOTAL RECOVERABLE (UG/L AS AG)
01077	SILVER, TOTAL (UG/L AS AG)
01078	SILVER, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS AG)
01078	SILVER, TOTAL IN BOTTOM MATERIAL (UG/G AS AG)
07122	SILVER 110, SUSPENDED TOTAL (PCI/L)
07122	SILVER 110, SUSPENDED (PCI/L)
07123	SILVER 110, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
07123	SILVER 110, SUSPENDED, COUNTING ERROR (PCI/L)
39763	SILVEX, SUSPENDED TOTAL (UG/L)
39763	SILVEX, SUSPENDED (UG/L)
70299	SOLIDS, RESIDUE AT 110 DEG. C, SUSPENDED TOTAL (MG/L)
70299	SOLIDS, RESIDUE AT 110 DEG. C, SUSPENDED (MG/L)
01081	STRONTIUM, SUSPENDED RECOVERABLE (UG/L AS SR)
01081	STRONTIUM, SUSPENDED (UG/L AS SR)
01082	STRONTIUM, TOTAL RECOVERABLE (UG/L AS SR)
01082	STRONTIUM, TOTAL (UG/L AS SR)
01083	STRONTIUM, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS SR)
01083	STRONTIUM, TOTAL IN BOTTOM MATERIAL (UG/G AS SR)
13505	STRONTIUM 90, SUSPENDED TOTAL (PCI/L)
13505	STRONTIUM 90, SUSPENDED (PCI/L)

ALPHABETIC LISTING--CONTINUED

PARM. CODE	NEW TERMINOLOGY -- FIRST LINE OLD TERMINOLOGY -- SECOND LINE
13506	STRONTIUM 90, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
13506	STRONTIUM 90, SUSPENDED, COUNTING ERROR (PCI/L)
07142	SULFUR 35, SUSPENDED TOTAL (PCI/L)
07142	SULFUR 35, SUSPENDED (PCI/L)
07143	SULFUR 35, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
07143	SULFUR 35, SUSPENDED, COUNTING ERROR (PCI/L)
01101	TIN, SUSPENDED RECOVERABLE (UG/L AS SN)
01101	TIN, SUSPENDED (UG/L AS SN)
01102	TIN, TOTAL RECOVERABLE (UG/L AS SN)
01102	TIN, TOTAL (UG/L AS SN)
01151	TITANIUM, SUSPENDED TOTAL (UG/L AS TI)
01151	TITANIUM, SUSPENDED (UG/L AS TI)
39402	TOXAPHENE, SUSPENDED TOTAL (UG/L)
39402	TOXAPHENE, SUSPENDED (UG/L)
07010	TRITIUM, SUSPENDED TOTAL (PCI/L)
07010	TRITIUM, SUSPENDED (PCI/L)
07011	TRITIUM, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
07011	TRITIUM, SUSPENDED, COUNTING ERROR (PCI/L)
07014	TRITIUM, SUSPENDED TOTAL, COUNTING ERROR (TRITIUM UNITS)
07014	TRITIUM, SUSPENDED, COUNTING ERROR (TRITIUM UNITS)
07016	TRITIUM, SUSPENDED TOTAL (TRITIUM UNITS)
07016	TRITIUM, SUSPENDED (TRITIUM UNITS)
22705	URANIUM, NATURAL, SUSPENDED TOTAL (UG/L AS U NATURAL)
22705	URANIUM, NATURAL, SUSPENDED (UG/L AS U NATURAL)
01086	VANADIUM, SUSPENDED TOTAL (UG/L AS V)
01086	VANADIUM, SUSPENDED (UG/L AS V)
01091	ZINC, SUSPENDED RECOVERABLE (UG/L AS ZN)
01091	ZINC, SUSPENDED (UG/L AS ZN)
01092	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)
01092	ZINC, TOTAL (UG/L AS ZN)
01093	ZINC, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS ZN)
01093	ZINC, TOTAL IN BOTTOM MATERIAL (UG/G AS ZN)
01161	ZIRCONIUM, SUSPENDED TOTAL (UG/L AS ZR)
01161	ZIRCONIUM, SUSPENDED (UG/L AS ZR)
39733	2,4-D, SUSPENDED TOTAL (UG/L)
39733	2,4-D, SUSPENDED (UG/L)
39743	2,4,5-T, SUSPENDED TOTAL (UG/L)
39743	2,4,5-T, SUSPENDED (UG/L)

09165000 DOLORES RIVER BELOW RICO, CO

LOCATION.--Lat 37°38'20", long 108°03'35", Dolores County, Hydrologic unit 14030002, on left bank at upstream side of Montelores bridge northwest of State Highway 145 (relocated), at Dolores-Montezuma County line, 0.5 mi (0.8 km) upstream from Ryman Creek, and 4.0 mi (6.4 km) southwest of Rico.

DRAINAGE AREA.--105 mi² (272 km²).

PERIOD OF RECORD.--October 1951 to current year.

GAGE.--Water-stage recorder. Datum of gage is 8,422.23 ft (2,567.096 m), National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter period, which are poor. No diversion above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--27 years, 128 ft³/s (3.625 m³/s), 92,740 acre-ft/yr (114 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,120 ft³/s (60.0 m³/s) June 10, 1952, gage height, 6.15 ft (1.875 m); minimum daily, 7.0 ft³/s (0.20 m³/s) Nov. 16, 17, 1956, Feb. 6, 7, 1961.

EXTREMES OUTSIDE PERIOD OF RECORD.--Greatest flood since at least 1885 occurred Oct 5, 1911.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,330 ft³/s (37.7 m³/s) June 10, gage height, 5.12 ft (1.561 m); minimum daily, 12 ft³/s (0.34 m³/s) Feb. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	23	20	16	16	16	100	205	1010	302	70	32
2	22	24	20	16	16	17	78	180	930	274	61	29
3	22	24	20	15	16	19	67	162	874	255	55	27
4	21	25	20	16	16	18	64	150	937	225	52	26
5	21	25	19	16	16	18	65	140	660	200	49	26
6	25	29	18	16	16	18	67	124	895	183	46	25
7	84	28	20	17	16	18	86	115	860	175	46	27
8	56	25	20	17	16	18	97	106	895	162	45	25
9	41	24	20	16	16	18	88	107	993	154	45	24
10	37	24	20	16	16	19	80	132	1140	165	46	24
11	32	24	20	16	15	19	99	156	1120	158	46	23
12	30	25	20	16	15	20	150	205	1080	150	46	22
13	30	23	19	16	14	19	170	264	1080	138	43	21
14	29	23	19	16	14	18	154	415	1110	124	41	21
15	28	24	19	17	14	18	148	624	1140	118	38	21
16	27	22	19	17	15	19	160	790	1060	124	35	21
17	26	21	20	17	15	20	148	748	944	116	35	30
18	25	21	19	16	16	21	132	558	853	130	33	30
19	25	20	18	16	14	23	138	594	790	109	32	27
20	25	20	17	16	13	25	168	648	727	104	32	25
21	26	20	16	15	12	27	202	612	690	92	32	22
22	25	20	16	15	13	3[illegible]	202	558	666	89	39	22
23	25	20	16	15	15	3[illegible]	200	684	624	80	40	22
24	23	20	16	16	15	32	246	748	612	79	34	24
25	23	20	15	16	15	29	318	776	568	75	32	25
26	23	20	15	16	15	35	350	755	490	71	35	24
27	22	21	15	16	15	44	390	708	415	68	31	26
28	22	21	15	15	15	51	314	588	425	67	29	29
29	22	21	16	16	---	52	274	654	400	73	30	24
30	25	20	16	16	---	68	243	853	330	65	30	21
31	23	---	16	16	---	85	---	986	---	68	30	---
TOTAL	887	677	559	496	420	869	4998	14345	24538	4198	1258	745
MEAN	28.6	22.6	18.0	16.0	15.0	28.0	167	463	818	135	40.6	24.8
MAX	84	29	20	17	16	85	390	986	1140	302	70	32
MIN	21	20	15	15	12	16	64	106	330	65	29	21
AC-FT	1760	1340	1110	984	833	1720	9910	28450	48670	8330	2500	1480

CAL YR 1977 TOTAL 14455 MEAN 39.6 MAX 167 MIN 12 AC-FT 28670
WTR YR 1978 TOTAL 53990 MEAN 148 MAX 1140 MIN 12 AC-FT 107100

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09166500 DOLORES RIVER AT DOLORES, CO

LOCATION.--Lat 37°28'16", long 108°30'15", in NE¼NE¼ sec.16, T.37 N., R.15 W., Montezuma County, Hydrologic Unit 14030002, on left bank 70 ft (21 m) downstream from bridge on State Highway 184 in Dolores and 0.4 mi (0.6 km) upstream from Lost Canyon Creek.

DRAINAGE AREA.--504 mi^2 (1,305 km^2).

PERIOD OF RECORD.--June 1895 to October 1903, August 1910 to November 1912, October 1921 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 859: 1937. WRD Colo. 1972: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 6,918.74 ft (2,108.832 m), National Geodetic Vertical Datum of 1929. See WSP 1713 or 1733 for history of changes prior to Oct. 7, 1952.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of about 2,000 acres (8.1 km^2) above station. Flow partly regulated by Ground Hog Reservoir, capacity, 21,710 acre-ft (26.8 hm^3/yr). Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--67 years (water years 1896-1903, 1911-12, 1922-78), 423 ft^3/s (11.98 m^3/s), 306,500 acre-ft/yr (378 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,000 ft^3/s (283 m^3/s) Oct. 5, 1911, gage height, 10.2 ft (3.11 m), site and datum then in use, from rating curve extended above 2,800 ft^3/s (79 m^3/s); minimum daily, 8.0 ft^3/s (0.23 m^3/s) Aug. 16, 1896.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1865, that of Oct. 5, 1911.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,800 ft^3/s (51 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Apr. 27	0100	2450	69.4	7.22	2.201	May 17	0200	*3440	97.4	8.07	2.460

Minimum daily discharge, 36 ft^3/s (1.02 m^3/s) Feb. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	50	48	42	44	48	640	1280	2510	630	317	187
2	42	45	48	40	46	55	525	1140	2450	595	294	187
3	39	48	48	40	46	55	434	1080	2310	555	284	187
4	38	48	50	40	46	60	390	1010	2330	498	274	108
5	38	48	50	42	46	60	421	873	2210	439	284	55
6	42	58	46	42	46	60	421	792	2010	403	277	51
7	79	78	46	42	46	60	560	723	2020	373	263	57
8	146	66	46	44	46	60	630	680	2060	357	253	78
9	102	44	48	44	48	60	570	768	2230	321	256	65
10	83	44	48	44	48	60	466	942	2430	325	249	57
11	76	48	48	44	46	64	530	1030	2450	313	217	51
12	68	53	48	44	44	65	780	1150	2290	302	196	52
13	61	47	46	44	44	72	921	1410	2230	291	184	57
14	57	45	46	42	44	72	876	1910	2190	252	181	52
15	51	46	46	42	44	70	907	2590	2180	235	175	52
16	49	44	46	44	44	80	1050	2950	2060	238	170	51
17	47	42	48	48	44	74	914	2890	1740	238	168	50
18	46	49	48	48	44	80	786	2110	1510	270	175	57
19	45	48	48	46	42	86	852	2070	1430	229	172	64
20	44	45	44	44	40	100	977	2240	1400	220	175	61
21	45	40	42	44	40	110	1180	2160	1280	232	175	54
22	49	51	40	42	36	140	1140	1910	1220	229	193	50
23	49	48	40	44	40	146	1100	2240	1120	229	208	49
24	48	48	40	42	44	148	1340	2380	1080	229	193	52
25	47	50	40	44	46	146	1640	2390	1100	235	184	80
26	46	48	38	44	46	162	1840	2220	984	238	178	82
27	46	49	38	44	46	202	2110	2210	786	274	175	71
28	44	48	40	44	46	252	1740	1790	762	263	170	74
29	44	39	40	44	---	277	1610	1810	786	260	172	74
30	55	45	40	44	---	353	1480	2170	705	313	175	66
31	59	---	40	44	---	434	---	2450	---	305	190	---
TOTAL	1728	1462	1384	1346	1242	3711	28830	53362	51883	9911	6597	2231
MEAN	55.7	48.7	44.6	43.4	44.4	120	961	1721	1729	320	213	74.4
MAX	146	78	50	48	48	434	2110	2950	2510	630	317	187
MIN	38	39	38	40	36	48	390	680	705	220	168	49
AC-FT	3430	2900	2750	2670	2460	7360	57180	105800	102900	19660	13090	4430

CAL YR 1977 TOTAL 31349 MEAN 85.9 MAX 385 MIN 22 AC-FT 62180
WTR YR 1978 TOTAL 163687 MEAN 448 MAX 2950 MIN 36 AC-FT 324700

09168100 DISAPPOINTMENT CREEK NEAR DOVE CREEK, CO

LOCATION.--Lat 37°52'36", long 108°34'57", Dolores County, Hydrologic Unit 14030002, 0.2 mi (0.3 km) downstream from ford, 6.5 mi (10.5 km) southeast of Cedar, and 19 mi (31 km) northeast of town of Dove Creek.

DRAINAGE AREA.--147 mi^2 (381 km^2).

PERIOD OF RECORD.--August 1957 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,420 ft (1,957 m), from topographic map.

REMARKS.--Records good except those for winter period, which are poor. Several small reservoirs and ponds above station. Small diversions for irrigation above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--21 years, 16.2 ft^3/s (0.459 m^3/s), 11,740 acre-ft/yr (14.5 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,270 ft^3/s (206 m^3/s) July 24, 1977, gage height, 13.38 ft (4.078 m), from rating curve extended above 250 ft^3/s (7.1 m^3/s), on basis of slope-area measurements at gage heights 7.18, 9.86, 10.95, 13.38, and 13.54 ft (2.188, 3.005, 3.338, 4.078, and 4.127 m); maximum gage height, 13.54 ft (4.127 m) July 13, 1965 (slope-area measurement); no flow at times most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,300 ft^3/s (36.8 m^3/s) Oct. 7, gage height, 8.50 ft (2.591 m), only peak above base of 560 ft^3/s (16 m^3/s); no flow Oct. 1-6, 17-25, July 24 to Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	3.0	.40	.60	1.0	20	153	64	95	9.8	.00	.00
2	.00	.67	.40	.20	.80	6.0	63	56	92	7.2	.00	.00
3	.00	1.2	.60	.40	.20	6.6	46	46	84	6.3	.00	.00
4	.00	.48	.60	.80	.40	3.3	35	45	82	5.5	.00	.00
5	.00	.29	.60	1.2	.80	5.2	35	42	72	5.5	.00	.00
6	.00	20	.40	1.4	1.2	3.3	35	46	64	5.2	.00	.00
7	277	6.0	.20	1.2	1.4	2.1	46	47	69	4.6	.00	.00
8	12	3.2	.40	1.0	1.4	1.9	48	53	69	3.8	.00	.00
9	7.8	3.0	.40	1.0	.80	2.1	40	90	68	3.6	.00	.00
10	4.0	3.0	.20	1.4	1.2	2.6	28	116	74	3.3	.00	.00
11	2.0	2.4	.20	1.4	2.0	3.1	28	96	75	3.3	.00	.00
12	.48	1.0	.40	1.2	1.4	3.8	50	64	66	2.9	.00	.00
13	.29	.80	.60	1.2	1.0	2.1	56	65	60	1.9	.00	.00
14	.10	.60	.20	1.2	.80	1.6	46	86	56	1.6	.00	.00
15	.06	.40	.40	1.6	.60	.80	46	118	56	1.4	.00	.00
16	.04	.20	.80	2.0	.80	.65	47	136	50	1.2	.00	.00
17	.00	.20	.20	2.0	1.2	.65	39	136	40	.95	.00	.00
18	.00	.40	.20	1.8	.80	2.1	28	87	33	.80	.00	.00
19	.00	.80	.20	1.2	.60	4.3	32	82	30	.55	.00	.00
20	.00	1.0	.20	1.2	.80	10	37	100	30	.45	.00	.00
21	.00	.80	.20	1.4	1.0	16	49	98	24	.35	.00	.00
22	.00	1.0	.40	1.0	1.0	56	41	83	20	.25	.00	.00
23	.00	1.2	1.0	.80	.80	26	40	95	19	.05	.00	.00
24	.00	1.2	1.6	.80	.80	20	51	108	16	.00	.00	.00
25	.00	1.0	1.0	.40	1.0	20	68	106	15	.00	.00	.00
26	.08	.80	.20	.60	1.2	22	84	83	14	.00	.00	.00
27	.06	.80	.20	1.0	1.4	25	108	93	13	.00	.00	.00
28	.04	.80	1.0	.80	1.6	28	73	75	12	.00	.00	.00
29	.06	.80	1.6	.40	---	33	61	74	13	.00	.00	.00
30	41	.60	1.6	.40	---	46	67	90	15	.00	.00	.00
31	10	---	1.6	1.0	---	81	---	96	---	.00	.00	---
TOTAL	355.01	57.64	18.00	32.60	28.00	455.20	1580	2576	1426	70.50	.00	.00
MEAN	11.5	1.92	.58	1.05	1.00	14.7	52.7	83.1	47.5	2.27	.000	.000
MAX	277	20	1.6	2.0	2.0	81	153	136	95	9.8	.00	.00
MIN	.00	.20	.20	.20	.20	.65	28	42	12	.00	.00	.00
AC-FT	704	114	36	65	56	903	3130	5110	2830	140	.00	.00

CAL YR 1977 TOTAL 2253.99 MEAN 6.18 MAX 601 MIN .00 AC-FT 4470
WTR YR 1978 TOTAL 6598.95 MEAN 18.1 MAX 277 MIN .00 AC-FT 13090

NOTE.--NO GAGE-HEIGHT RECORD NOV. 11 TO FEB. 27.

09169500 DOLORES RIVER AT BEDROCK, CO

LOCATION.--Lat 38°18'37", long 108°53'05", in NW¼SW¼ sec.20, T.47 N., R.18 W., Montrose County, Hydrologic Unit 14030002, on right bank at upstream side of bridge, 0.4 mi (0.6 km) southeast of Bedrock, and 3.1 mi (5.0 km) upstream from East Paradox Creek.

DRAINAGE AREA.--2,024 mi² (5,242 km²).

PERIOD OF RECORD.--October 1917 to September 1922 (monthly discharge only for some periods, published in WSP 1313). August 1971 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,940 ft (1,506 m), from topographic map. Prior to Aug. 1, 1971, nonrecording gage at different datum.

REMARKS.--Records good except those for winter period, which are poor. Diversions above station for irrigation of about 5,000 acres (20 km²) above station and about 33,000 acres (130 km²) in the San Juan River basin. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--12 years (water years 1918-22, 1972-78), 440 ft³/s (12.46 m³/s), 318,800 acre-ft/yr (393 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,280 ft³/s (263 m³/s) Apr. 30, 1973, gage height, 12.09 ft (3.685 m), from floodmarks, from rating curve extended above 8,700 ft³/s (250 m³/s); no flow Sept. 13, 1974, Aug. 15 to 18, 1978.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 6, 1970, reached a stage of 7.15 ft (2.179 m), present datum, from floodmarks (discharge not determined).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,450 ft³/s (126 m³/s) May 20, gage height, 10.30 ft (3.139 m), from floodmarks; minimum daily, 0 ft³/s Aug. 15 to 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.8	7.9	7.9	22	38	45	2000	2150	2310	295	1.3	1.9
2	3.1	6.9	8.7	15	41	46	2800	1820	2370	240	.46	1.8
3	3.1	11	8.2	38	37	59	1800	1680	2280	197	.40	1.3
4	2.9	11	8.2	42	34	96	1450	1520	2210	151	.46	1.3
5	2.9	10	8.2	40	36	93	1400	1430	2230	126	.22	1.4
6	3.9	63	8.2	35	38	80	1500	1330	2050	104	.16	1.4
7	385	285	7.2	26	46	70	1800	1350	1920	69	.74	2.5
8	312	163	7.2	25	55	64	2550	1350	1940	53	.22	2.8
9	105	66	6.9	24	51	57	2300	1440	2020	40	.64	3.0
10	45	30	6.8	36	53	51	1650	2320	2130	32	.64	3.0
11	28	21	8.4	39	60	57	1340	2170	2340	49	.58	3.0
12	15	17	6.4	34	61	59	2600	1960	2270	45	.56	3.0
13	13	15	6.7	30	55	67	3560	1960	2130	23	.10	3.3
14	12	13	6.4	37	54	62	3590	2070	2090	20	.07	3.6
15	10	13	6.2	44	41	53	3390	2500	2000	18	.00	4.2
16	9.2	12	5.9	37	44	46	3400	3180	1990	16	.00	4.2
17	8.8	11	6.0	44	41	41	3110	3590	1860	16	.00	3.9
18	8.9	11	7.1	40	38	38	2360	3440	1460	16	.00	5.7
19	8.6	10	5.0	37	41	35	1820	2640	1190	22	.83	5.7
20	8.3	9.9	6.9	33	38	35	1970	2810	1010	15	.34	4.7
21	8.0	9.0	7.2	33	39	35	2140	2730	990	9.3	.46	4.7
22	7.9	10	8.0	32	37	48	2280	2480	835	10	.52	4.7
23	7.9	9.5	9.0	38	40	71	2070	2410	790	8.5	.10	4.7
24	7.7	9.0	13	37	40	238	1990	2460	660	5.7	.07	4.4
25	7.7	8.9	13	16	43	245	2320	2420	592	5.0	.01	4.4
26	7.6	9.0	8.0	14	46	234	2580	2250	576	3.9	.11	4.4
27	7.5	9.0	13	32	50	231	2380	2210	516	1.9	.02	4.4
28	7.8	8.8	24	40	45	305	2350	2220	373	1.6	.63	4.4
29	7.8	8.6	42	38	---	505	2330	1880	295	1.6	1.3	4.4
30	8.0	8.4	40	36	---	656	2280	1920	319	1.4	.90	3.9
31	8.9	---	38	39	---	1030	---	2160	---	.58	2.7	---
TOTAL	1074.3	876.9	357.7	1033	1242	4752	69110	67850	45746	1596.48	14.54	106.1
MEAN	34.7	29.2	11.5	33.3	44.4	153	2304	2189	1525	51.5	.47	3.54
MAX	385	285	42	44	61	1030	3590	3590	2370	295	2.7	5.7
MIN	2.8	6.9	5.0	14	34	35	1340	1330	295	.58	.00	1.3
AC-FT	2130	1740	709	2050	2460	9430	137100	134600	90740	3170	29	210

CAL YR 1977 TOTAL 11836.30 MEAN 32.4 MAX 1130 MIN .04 AC-FT 23480
WTR YR 1978 TOTAL 193759.02 MEAN 531 MAX 3590 MIN .00 AC-FT 384300

09171100 DOLORES RIVER NEAR BEDROCK, CO

LOCATION.--Lat 38°21'29", long 108°49'54", in SW¼NW¼ sec.2, T.47 N., R.18 W., Montrose County, Hydrologic Unit 14030002, on right bank 2.5 mi (4.0 km) downstream from West Paradox Creek and 4.3 mi (6.9 km) northeast of Bedrock.

DRAINAGE AREA.--2,145 mi² (5,556 km²).

PERIOD OF RECORD.--August 1971 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,910 ft (1,497 m), from topographic map. Prior to Feb. 1, 1972, at site 400 ft (120 m) upstream at datum 1.02 ft (0.311 m) higher.

REMARKS.--Records good. Diversions above station for irrigation of about 41,000 acres (170 km²), of which about 33,000 acres (130 km²) is in the San Juan River basin. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--7 years, 394 ft³/s (11.16 m³/s), 285,500 acre-ft/yr (352 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,500 ft³/s (269 m³/s) Apr. 30, 1973, gage height, 12.88 ft (3.926 m), from floodmarks; minimum daily, 0.12 ft³/s (0.003 m³/s) July 17, 18, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 6, 1970, reached a stage of 11.25 ft or 3.429 m (revised), site and datum in use prior to Feb. 1, 1972 (discharge, 5,710 ft³/s or 162 m³/s), by slope-area measurement at site 1,400 ft (430 m) upstream.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,790 ft³/s (136 m³/s) May 20, gage height, 10.30 ft (3.139 m); minimum daily, 0.35 ft³/s (0.010 m³/s) Sept. 2, 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.1	9.2	10	25	45	65	2100	2020	2250	300	2.4	.38
2	4.2	11	12	18	46	64	3040	1780	2370	250	2.3	.35
3	4.6	19	12	41	43	70	1910	1600	2280	200	1.8	.35
4	4.6	15	12	46	40	100	1550	1460	2250	160	1.2	.38
5	4.6	13	12	49	44	105	1490	1370	2100	130	1.0	.38
6	5.2	85	13	45	46	93	1580	1280	1970	110	1.0	.38
7	675	407	14	32	51	84	1860	1330	1900	80	.95	.38
8	893	172	13	31	68	76	2680	1370	1980	60	.86	.50
9	137	68	12	28	59	71	2430	1370	2100	50	1.0	1.4
10	59	31	12	43	65	65	1740	2660	2210	40	1.2	2.0
11	28	21	12	48	79	66	1440	2460	2470	50	1.1	2.2
12	17	18	13	43	70	70	2170	1940	2440	87	1.0	2.0
13	14	17	11	34	66	76	3450	1860	2260	35	1.2	2.3
14	12	15	12	40	64	71	3460	2040	2140	28	1.4	3.0
15	11	15	12	48	55	62	3190	2670	1900	23	1.1	4.1
16	9.8	14	13	45	53	55	3290	3540	1900	20	1.1	4.1
17	8.9	14	9.5	52	51	49	2910	3950	1770	19	.59	4.1
18	8.3	14	13	53	45	48	2140	3780	1510	18	.44	3.9
19	8.3	14	11	44	46	46	1740	2570	1260	26	.50	6.7
20	8.0	13	7.7	40	51	46	1900	2850	1050	20	.68	5.0
21	7.7	13	7.7	40	51	48	2160	2660	1000	12	.77	4.8
22	7.7	13	8.9	37	48	65	2220	2620	840	10	.86	5.0
23	7.7	13	12	45	53	80	1960	2190	800	11	.77	5.0
24	7.7	13	16	43	52	253	1860	2300	680	7.7	.44	5.2
25	7.7	13	16	19	55	247	2180	2370	600	6.1	.47	4.8
26	7.7	13	11	17	60	222	2480	2300	590	5.9	.44	5.0
27	7.7	13	16	35	64	216	2740	2100	530	4.2	.41	5.2
28	8.0	12	28	43	58	317	3000	2220	380	3.4	.44	5.2
29	8.0	12	51	41	---	545	2380	1650	300	3.6	.41	5.4
30	8.5	11	49	37	---	705	2130	1720	320	2.3	.38	5.4
31	9.0	---	48	46	---	1220	---	2020	---	4.6	.41	---
TOTAL	2004.0	1111.2	499.8	1208	1528	5300	69180	68050	46150	1776.8	28.62	94.90
MEAN	64.6	37.0	16.1	39.0	54.6	171	2306	2195	1538	57.3	.92	3.16
MAX	893	407	51	53	79	1220	3460	3950	2470	300	2.4	6.7
MIN	4.1	9.2	7.7	17	40	46	1440	1280	300	2.3	.38	.35
AC-FT	3970	2200	991	2400	3030	10510	137200	135000	91540	3520	57	188

CAL YR 1977 TOTAL 21419.99 MEAN 58.7 MAX 2330 MIN .12 AC-FT 42490
WTR YR 1978 TOTAL 196931.32 MEAN 540 MAX 3950 MIN .35 AC-FT 390600

09172500 SAN MIGUEL RIVER NEAR PLACERVILLE, CO

LOCATION.--Lat 38°02'05", long 108°07'15", in NW¼SW¼ sec.30, T.44 N., R.11 W., San Miguel County, Hydrologic Unit 14030003, on right bank 0.7 mi (1.1 km) downstream from Specie Creek and 4.0 mi (6.4 km) northwest of Placerville.

DRAINAGE AREA.--308 mi² (798 km²).

PERIOD OF RECORD.--January to December 1909, September 1910 to December 1912, April 1930 to September 1934, April 1942 to current year. Monthly discharge only for some periods, published in WSP 1313. Published as "at Placerville," 1910-12.

GAGE.--Water-stage recorder. Datum of gage is 7,055.80 ft (2,150.608 m) (U.S. Bureau of Reclamation bench mark). See WSP 1713 or 1733 for history of changes prior to Oct. 21, 1958.

REMARKS.--Records good. Diversions for irrigation of about 1,700 acres (6.88 km²) above station. One diversion from Fall Creek for irrigation of about 2,000 acres (8.09 km²) in Beaver and Saltado Creek basins. One small ditch diverts water from Leopard Creek to Uncompahgre River basin. Slight regulation by Lake Hope and Trout Lake of Western Colorado Co., combined capacity, 5,040 acre-ft (6.21 hm³). Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--42 years (water years 1911-12, 1931-34, 1943-78), 223 ft³/s (6.315 m³/s), 161,600 acre-ft/yr (199 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,000 ft³/s (283 m³/s) Sept. 5, 1909 (result of failure of Trout and Middle Reservoir Dams); minimum daily, 26 ft³/s (0.74 m³/s) Jan. 5, 1960.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 900 ft³/s (25 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Apr. 26	1900	1090	30.9	4.45	1.356	June 16	0500	*1770	50.1	5.18	1.579
May 10	1900	970	27.5	4.35	1.326						

Minimum daily, 42 ft³/s (1.19 m³/s) Feb. 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	69	53	60	49	51	50	138	331	810	674	206	76
2	69	51	57	50	50	50	120	303	800	690	176	77
3	68	52	52	55	45	50	122	295	820	682	164	76
4	67	52	50	55	50	51	135	291	830	634	152	74
5	68	54	51	65	61	50	145	255	726	589	145	77
6	69	58	45	65	50	50	132	244	674	540	142	77
7	119	67	54	69	49	50	145	241	780	534	145	86
8	83	61	51	68	46	50	182	227	880	522	135	80
9	72	50	51	67	42	52	179	291	920	510	138	77
10	65	56	50	57	49	58	155	519	1260	575	138	70
11	63	60	54	62	46	56	152	390	1300	575	130	74
12	57	57	56	68	44	53	213	348	1280	568	130	77
13	56	54	55	65	49	53	259	362	1290	510	130	77
14	55	56	50	64	55	56	275	445	1260	470	128	73
15	54	57	50	65	50	53	303	568	1400	470	126	77
16	53	54	48	63	54	51	311	708	1520	498	120	76
17	53	56	48	62	47	55	271	699	1400	486	114	77
18	52	57	53	57	45	56	216	528	1240	528	108	83
19	52	59	47	52	50	57	234	480	1250	430	105	84
20	50	58	55	57	56	58	271	528	1280	420	103	96
21	52	62	55	51	58	61	311	554	1280	395	103	86
22	52	63	55	44	51	68	287	498	1230	362	106	80
23	51	62	52	50	54	70	283	561	1150	327	105	76
24	50	53	51	47	50	68	366	618	1240	311	99	77
25	50	55	60	47	50	64	435	634	1380	291	118	77
26	51	53	55	61	48	63	632	610	1170	259	126	74
27	50	51	55	53	46	74	554	634	870	255	89	73
28	60	52	50	63	50	99	430	547	900	238	82	76
29	72	52	50	50	---	101	376	504	870	230	78	73
30	76	51	50	58	---	99	362	603	690	216	89	72
31	57	---	52	56	---	108	---	744	---	213	76	---
TOTAL	1915	1676	1622	1795	1396	1934	7994	14560	32500	14002	3806	2328
MEAN	61.8	55.9	52.3	57.9	49.9	62.4	266	470	1083	452	123	77.6
MAX	119	67	60	69	61	108	632	744	1520	690	206	96
MIN	50	50	45	44	42	50	120	227	674	213	76	70
AC-FT	3800	3320	3220	3560	2770	3840	15860	28880	64460	27770	7550	4620

CAL YR 1977 TOTAL 31923 MEAN 87.5 MAX 376 MIN 34 AC-FT 63320
WTR YR 1978 TOTAL 85528 MEAN 234 MAX 1520 MIN 42 AC-FT 169600

09172600 SALTADO CREEK NEAR NORWOOD, CO

LOCATION.--Lat 37°55'25", long 108°07'51", in NE¼NE¼ sec.12, T.42 N., R.12 W., San Miguel County, Hydrologic Unit 14030003, on right bank 150 ft (46 m) upstream from point of return flow from McCulloch Creek ditch and 18 mi (29 m) southeast of Norwood.

DRAINAGE AREA.--4.53 mi² (11.73 km²).

PERIOD OF RECORD.--April 1976 to current year (seasonal records only).

GAGE.--Water-stage recorder. Altitude of gage is 9,270 ft (2,825 m), from topographic map.

REMARKS.--Records good except those for winter period, which are fair. Seasonal station operated only for runoff period April to July. No diversion above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 58 ft³/s (1.64 m³/s) May 15, 1978, gage height, 3.13 ft (0.954 m); minimum daily, 0.02 ft³/s (0.001 m³/s) July 13, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 58 ft³/s (1.64 m³/s) May 15, gage height, 3.13 ft (0.954 m); minimum daily, 0.42 ft³/s (0.012 m³/s) July 27, 30, 31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							2.6	7.4	14	4.6		
2							2.4	6.3	13	4.4		
3							2.4	6.5	13	4.1		
4							2.6	6.3	11	4.0		
5							2.8	5.7	11	4.0		
6							2.6	5.3	10	4.0		
7							3.0	4.9	9.8	3.9		
8							3.6	4.9	9.8	3.9		
9							3.4	5.7	9.8	2.0		
10							3.2	8.1	9.8	1.7		
11							3.0	10	10	1.7		
12							4.0	11	10	1.4		
13							5.0	16	9.8	1.2		
14							5.5	31	9.3	1.0		
15							5.5	37	8.5	1.0		
16							6.0	36	8.5	1.2		
17							5.5	24	8.1	1.0		
18							4.4	19	7.4	1.8		
19							5.0	20	6.7	.99		
20							5.3	20	6.7	.93		
21							5.9	19	6.3	.75		
22							5.7	19	5.9	.69		
23							5.9	20	5.9	.63		
24							7.4	19	5.9	.57		
25							8.3	17	5.5	.63		
26							11	16	5.1	.51		
27							9.8	15	5.1	.42		
28							9.3	14	4.9	.57		
29							9.3	14	4.9	.45		
30							8.8	14	4.7	.42		
31							---	14	---	.42		
TOTAL							159.2	466.1	250.4	54.88		
MEAN							5.31	15.0	8.35	1.77		
MAX							11	37	14	4.6		
MIN							2.4	4.9	4.7	.42		
AC-FT							316	925	497	109		

09172700 GURLEY DITCH NEAR NORWOOD, CO

LOCATION.--Lat 38°00'54", long 108°14'27", in SE¼NE¼ sec.1, T.43 N., R.13 W., San Miguel County, Hydrologic Unit 14030003, on right bank 0.9 mi (1.4 km) upstream from Gurley Reservoir and 8.4 mi (13.5 km) south of Norwood.

PERIOD OF RECORD.--May 1975 to current year (irrigation season only).

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 8,340 ft (2,542 m), from topographic map.

REMARKS.--Records good. Gurley ditch diverts water from tributaries of Beaver Creek to Gurley Reservoir. Water is used for irrigation of lands near Norwood. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 392 ft³/s (11.1 m³/s) June 5, 1975; no flow May 1, 2, 1975, Apr. 1, 1976, Apr. 1-7, Aug. 5-15, 1977.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							6.0	85	133	58	14	3.0
2							6.0	70	205	50	9.0	4.0
3							7.0	65	192	45	8.5	3.8
4							8.0	60	176	40	7.0	3.2
5							7.5	53	151	36	6.5	2.8
6							7.5	46	161	33	6.0	2.8
7							8.0	41	180	29	6.0	3.8
8							8.0	37	183	28	5.5	3.2
9							8.0	41	205	28	5.0	2.8
10							8.5	62	209	30	5.5	2.8
11							9.0	75	153	29	6.0	2.8
12							14	97	166	27	5.5	2.2
13							15	130	180	24	5.0	2.2
14							16	209	195	21	6.0	2.2
15							18	276	212	19	5.0	2.5
16							21	314	185	19	4.0	2.8
17							18	281	144	18	3.8	2.5
18							16	220	136	24	3.2	3.8
19							21	254	136	17	3.2	5.5
20							34	269	128	16	3.2	3.8
21							51	247	116	14	3.0	3.2
22							54	236	110	13	3.0	3.8
23							60	287	102	12	3.8	3.5
24							85	318	97	12	3.2	3.2
25							116	288	96	11	3.0	3.5
26							136	251	85	9.6	3.8	3.0
27							139	150	75	9.0	3.0	.72
28							114	133	72	11	3.0	3.8
29							108	181	71	9.6	3.0	3.5
30							118	226	68	9.0	3.0	3.0
31							---	127	---	8.5	3.0	---
TOTAL							1237.5	5129	4322	709.7	152.7	93.72
MEAN							41.3	165	144	22.9	4.93	3.12
MAX							139	318	212	58	14	5.5
MIN							6.0	37	68	8.5	3.0	.72
AC-FT							2450	10170	8570	1410	303	186

09172800 WEST BEAVER CREEK NEAR NORWOOD, CO

LOCATION.--Lat 37°53'21", long 108°11'49", San Miguel County, Hydrologic Unit 14030003, on left bank 75 ft (23 m) downstream from trail bridge and 17.5 mi (28.2 km) southeast of Norwood.

DRAINAGE AREA.--4.83 mi² (12.51 km²).

PERIOD OF RECORD.--April 1976 to current year (seasonal records only).

GAGE.--Water-stage recorder. Altitude of gage is 9,750 ft (2,972 m), from topographic map.

REMARKS.--Records good except those for winter period, which are poor. No diversion above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 86 ft³/s (2.44 m³/s) May 17, 1976, May 23, 1978, gage height, 3.43 ft (1.045 m); maximum gage height, 5.83 ft (1.777 m) May 2, 1977 (backwater from ice); minimum daily discharge, 0.50 ft³/s (0.014 m³/s) Apr. 1, 1977.

EXTREMES FOR CURRENT SEASON.--Maximum discharge, 86 ft³/s (2.44 m³/s) May 23, gage height, 3.43 ft (1.045 m); maximum gage height, 4.47 ft (1.362 m) Apr. 24, (backwater from ice); minimum daily discharge, 1.8 ft³/s (0.051 m³/s) Apr. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							2.0	22	75	18		
2							1.8	17	74	16		
3							2.0	14	71	13		
4							2.0	12	70	12		
5							2.0	12	66	11		
6							2.0	11	67	10		
7							2.0	10	69	9.1		
8							2.2	7.9	69	8.2		
9							2.6	8.2	72	7.5		
10							2.4	11	73	7.5		
11							2.2	18	71	7.2		
12							2.4	25	68	6.8		
13							2.6	32	65	5.8		
14							3.0	51	65	5.5		
15							4.6	67	63	5.1		
16							5.0	75	58	4.6		
17							4.8	69	50	4.8		
18							4.2	57	44	5.8		
19							5.5	66	42	4.3		
20							8.0	67	41	4.1		
21							12	59	38	3.8		
22							14	60	36	3.4		
23							18	74	32	3.4		
24							20	77	31	3.1		
25							26	71	29	3.1		
26							32	70	27	2.9		
27							38	67	25	2.6		
28							34	61	24	2.6		
29							35	67	25	2.6		
30							33	72	23	2.4		
31							---	73	---	2.4		
TOTAL							325.3	1403.1	1563	198.6		
MEAN							10.8	45.3	52.1	6.41		
MAX							38	77	75	18		
MIN							1.8	7.9	23	2.4		
AC-FT							645	2780	3100	394		

09173000 BEAVER CREEK NEAR NORWOOD, CO

LOCATION.--Lat 37°58'13", Long 108°11'42", in NE¼SW¼ sec.21, T.43 N., R.12 W., San Miguel County, Hydrologic Unit 14030003, on right bank 250 ft (76 m) downstream from county road culvert, 550 ft (170 m) upstream from Goat Creek, and 13 mi (21 km) southeast of Norwood.

DRAINAGE AREA.--40.6 mi^2 (105.2 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1941 to September 1961, October 1962 to September 1967, April 1975 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Altitude of gage is 8,010 ft (2,441 m), from topographic map. Prior to July 16, 1952, at site 135 ft (41 m) downstream at different datums. July 17, 1952, to Sept. 30, 1961, at site 85 ft (26 m) downstream at different datum. Oct. 1, 1962, to Sept. 30, 1967, at site 200 ft (61 m) upstream at datum 8,016.81 ft (2,443.524 m) above mean sea level (U.S. Bureau of Reclamation bench mark). Datum lowered 2.00 ft (0.610 m) Oct. 1, 1948, and raised 8.00 ft (2.438 m) Oct. 1, 1962. Concrete control July 16, 1964, to Sept. 30, 1967.

REMARKS.--Records good except those for winter period, which are fair. Gurley ditch (station 09172700) diverts water above station to Gurley Reservoir, capacity, 8,800 acre-ft (10.9 hm^3); prior to September 1946, 3,200 acre-ft (3.95 hm^3), for irrigation of about 12,000 acres (48.6 km^2) in Naturita Creek drainage.

COOPERATION.--Records collected and computed by Colorado Division of Water Resources and reviewed by Geological Survey.

AVERAGE DISCHARGE.--28 years (water years 1942-61, 1963-67, 1976-78), 15.2 ft^3/s (0.430 m^3/s), 11,010 acre-ft/yr (13.6 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 750 ft^3/s (21.2 m^3/s) June 9 or 10, 1952, gage height, 5.67 ft (1.728 m), from floodmarks, site and datum then in use, from rating curve extended above 370 ft^3/s (10 m^3/s); no flow at times in many years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 158 ft^3/s (4.47 m^3/s) at 0030 May 27, gage height, 4.52 ft (1.378 m); no flow Aug. 4 to Sept. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.18	.64	.75	.85	.85	2.0	1.1	37	136	1.7	.06	.00
2	.20	.56	.80	.80	.70	2.5	1.2	32	119	1.4	.04	.00
3	.20	.56	.87	1.0	.80	2.0	.94	29	116	1.2	.02	.00
4	.20	.52	.68	1.5	1.0	2.0	3.0	29	113	.94	.00	.00
5	20	.52	.68	1.5	1.5	2.0	8.0	27	100	.87	.00	.00
6	.25	.52	.68	1.5	2.0	2.0	12	24	88	.76	.00	.00
7	1.3	.68	.68	.90	2.0	2.0	15	22	79	.76	.00	.00
8	.87	.76	.56	.90	1.5	2.0	16	21	75	.72	.00	.00
9	.56	.50	.60	1.0	.90	2.0	15	25	48	.72	.00	.00
10	.48	.56	.60	1.5	2.0	1.5	15	31	52	.68	.00	.00
11	.44	.56	.60	1.5	1.5	1.5	14	33	99	.68	.00	.00
12	.48	.56	.75	1.5	.80	1.5	22	35	58	.56	.00	.00
13	.44	.56	.70	1.0	.80	1.5	30	36	36	.44	.00	.00
14	.40	.60	.80	1.0	.80	1.5	34	39	14	.38	.00	.00
15	.40	.56	1.0	2.0	.80	1.0	41	54	8.6	.35	.00	.00
16	.40	.56	.85	1.0	1.0	3.0	43	76	14	.35	.00	.00
17	.40	.56	.80	1.5	.85	1.0	39	75	22	.48	.00	.00
18	.40	.52	.95	1.0	.85	.18	35	38	9.7	.64	.00	.00
19	.40	.76	.85	.95	.90	.14	34	31	4.7	.56	.00	.07
20	.40	2.6	.70	1.0	.95	.14	39	43	3.5	.40	.00	.76
21	.40	2.2	.70	1.5	1.0	.14	43	31	3.1	.25	.00	.52
22	.40	.94	.90	1.5	1.0	.32	37	29	2.8	.15	.00	.38
23	.40	.80	1.0	1.5	1.0	.30	35	46	2.5	.12	.00	.35
24	.40	.80	1.0	.80	1.0	.28	43	50	2.3	.12	.00	.30
25	.44	.80	1.0	.70	1.0	.28	53	46	2.1	.09	.00	.30
26	.40	.80	1.0	.80	1.0	.28	73	43	1.9	.04	.00	.30
27	.38	.80	1.0	.95	1.5	.30	98	136	1.9	.12	.00	2.1
28	.38	.80	1.0	.80	2.0	.30	54	105	1.9	.18	.00	.87
29	.40	.80	1.0	1.0	---	.30	46	76	2.1	.06	.00	.40
30	.72	.75	1.0	1.0	---	.32	43	68	2.1	.02	.00	.35
31	.68	---	.90	1.5	---	.44	---	136	---	.02	.00	---
TOTAL	13.60	23.15	25.40	35.95	32.00	34.72	943.24	1503	1218.2	15.76	.12	6.70
MEAN	.44	.77	.82	1.16	1.14	1.12	31.4	48.5	40.6	.51	.004	.22
MAX	1.3	2.6	1.0	2.0	2.0	3.0	98	136	136	1.7	.06	2.1
MIN	.18	.50	.56	.70	.70	.14	.94	21	1.9	.02	.00	.00
AC-FT	27	46	50	71	63	69	1870	2980	2420	31	.2	13

CAL YR 1977 TOTAL 786.88 MEAN 2.16 MAX 40 MIN .00 AC-FT 1560
WTR YR 1978 TOTAL 3851.84 MEAN 10.6 MAX 136 MIN .00 AC-FT 7640

NOTE.--NO GAGE-HEIGHT RECORD DEC. 18 TO MAR. 16.

09173000 BEAVER CREEK NEAR NORWOOD, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1977 to September 1978.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI FECAL, (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)
DEC											
06...	1645	E.68	310	8.2	.0	.60	10.6	--	<1	3	160
JAN											
03...	1500	E1.0	307	8.1	.0	--	10.9	19	<1	<1	160
FEB											
08...	1030	E1.5	300	8.2	.0	--	10.1	10	<1	<1	150
MAR											
01...	1040	E2.0	260	8.2	.0	--	10.9	15	2	152	140
APR											
12...	0750	19	220	7.5	2.0	--	10.2	9	K2	38	140
MAY											
03...	0900	28	176	7.6	5.0	--	9.3	16	K3	K2	88
22...	1200	29	203	8.7	10.0	3.0	8.2	18	K1	K7	100
JUN											
27...	0820	1.9	260	7.8	10.0	--	8.7	19	K12	22	130
SEP											
25...	1130	.30	327	8.4	4.0	.40	9.6	7	K2	65	160

DATE	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
DEC											
06...	18	45	11	6.0	.2	1.0	170	0	140	22	1.7
JAN											
03...	31	47	11	5.6	.2	.9	160	0	130	36	3.2
FEB											
08...	23	43	9.5	5.7	.2	.9	150	0	120	24	1.2
MAR											
01...	14	40	9.0	5.1	.2	.7	150	0	120	24	1.0
APR											
12...	52	37	12	10	.4	1.2	110	0	90	23	1.2
MAY											
03...	11	27	5.1	2.8	.1	.7	95	0	78	12	1.6
22...	12	31	6.3	3.3	.1	.7	110	1	92	15	1.0
JUN											
27...	15	37	8.4	4.6	.2	1.0	140	0	115	17	1.0
SEP											
25...	21	46	11	6.6	.2	1.2	160	5	140	27	1.5

E ESTIMATED.

K BASED ON NON-IDEAL COLONY COUNT.

09173000 BEAVER CREEK NEAR NORWOOD, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)
DEC 06...	.1	9.1	163	180	.32	.02	.01	.21	.22	.24
JAN 03...	.1	9.5	195	192	.32	.04	.07	.03	.10	.14
FEB 08...	.1	9.5	146	168	.20	.06	.02	.03	.05	.11
MAR 01...	.1	9.2	139	163	.56	.03	.00	.02	.02	.05
APR 12...	.1	8.7	124	147	6.36	.01	.00	.37	.37	.38
MAY 03...	.1	8.7	122	105	9.22	.00	.01	.38	.39	.39
22...	.1	9.3	125	122	9.79	.01	.00	.38	.38	.39
JUN 27...	.1	11	157	149	.81	.01	.01	.17	.18	.19
SEP 25...	.1	10	193	187	.16	.02	.01	.31	.32	.34

DATE	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	PHYTO-PLANK-TON, TOTAL (CELLS PER ML)	CHLOR-A PERI-PHYTON CHROMO-GRAPHIC FLUOROM (MG/M2)	CHLOR-B PERI-PHYTON CHROMO-GRAPHIC FLUOROM (MG/M2)	BIOMASS CHLORO-PHYLL RATIO PERI-PHYTON (UNITS)
DEC 06...	.00	.00	20	20	--	--	19	1.50	.760	333
JAN 03...	.01	.01	10	10	--	--	388	--	--	--
FEB 09...	.01	.01	20	20	3.6	--	87	--	--	--
MAR 01...	.01	.01	10	20	1.8	.2	220	--	--	--
APR 12...	.01	.00	10	50	7.1	.4	270	--	--	--
MAY 03...	.07	.02	30	30	4.7	.5	740	--	--	--
22...	.01	.00	30	20	6.4	.4	--	--	--	--
JUN 27...	.04	.01	30	40	4.3	.3	250	--	--	--
SEP 25...	.01	.00	30	20	3.9	.4	--	--	--	--

DATE	TIME	SOLIDS, RESIDUE AT 105 DEG. C, DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	BARIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS BA)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)
DEC 06...	1645	180	2	10	2	1	--	0	0	--	0
MAR 01...	1040	--	--	0	--	1	--	--	100	--	--
MAY 22...	1200	121	3	0	0	1	8	200	200	110	5
SEP 25...	1130	--	--	--	0	--	--	0	--	--	0

09173000 BEAVER CREEK NEAR NORWOOD, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	BERYLLIUM, DISSOLVED (UG/L AS BE)	BERYLLIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, DISSOLVED (UG/L AS CO)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)
DEC 06...	0	--	0	0	--	10	0	--	0	0	--
MAR 01...	0	--	--	0	--	--	0	--	--	5	--
MAY 22...	5	1	--	0	0	20	0	4	0	0	10
SEP 25...	--	--	1	--	--	0	--	--	3	--	--

DATE	COPPER, DISSOLVED (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	LITHIUM TOTAL RECOVERABLE (UG/L AS LI)	LITHIUM DISSOLVED (UG/L AS LI)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)
DEC 06...	1	--	2	0	--	0	0	8	20	--	.0
MAR 01...	0	--	--	2	--	--	10	--	10	--	--
MAY 22...	2	6	--	1	20	0	0	0	0	380	.0
SEP 25...	--	--	5	--	--	0	--	0	--	--	.0

DATE	MERCURY DISSOLVED (UG/L AS HG)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/L AS HG)	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	MOLYBDENUM, RECOV. FM BOTTOM MATERIAL (UG/G)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, DISSOLVED (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)
DEC 06...	.0	--	3	0	--	5	0	--	0	0	--
MAR 01...	.0	--	--	2	--	--	4	--	--	0	--
MAY 22...	.0	.0	4	0	1	--	0	12	0	0	0
SEP 25...	--	--	4	--	--	7	--	--	0	--	--

DATE	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	GROSS ALPHA DISSOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DISSOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DISSOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)
DEC 06...	.1	10	10	--	<2.0	<.4	1.9	<.4	1.8	<.4
MAR 01...	.0	--	0	--	--	--	--	--	--	--
MAY 22...	.0	40	10	37	<1.1	<.4	1.1	<.4	1.0	<.4
SEP 25...	--	10	--	--	<2.5	<.4	2.1	<.4	2.0	<.4

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DOLORES RIVER BASIN

09173000 BEAVER CREEK NEAR NORWOOD, CO--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
DEC				
06...	1645	E.68	8	.02
JAN				
03...	1500	E1.0	16	.03
FEB				
08...	1030	E1.5	1	<.01
MAR				
01...	1040	E2.0	3	.01
APR				
12...	0750	19	13	.67
MAY				
03...	0900	28	8	.60
22...	1200	29	11	.86
JUN				
27...	0820	1.9	2	.01
SEP				
25...	1130	.30	1	<.01

E ESTIMATED.

09173000 BEAVER CREEK NEAR NORWOOD, CO--Continued

PHYTOPLANKTON DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	DEC 6,77	JAN 3,78	FEB 8,78	MAR 1,78
TIME	1645	1500	1030	1040
TOTAL CELLS/ML	19	380	87	220
DIVERSITY: DIVISION	0.9	0.8	0.0	1.0
.CLASS	0.9	0.8	0.0	1.0
..ORDER	0.9	0.8	0.3	1.0
...FAMILY	1.6	1.2	1.7	1.6
....GENUS	1.6	2.0	1.7	1.6

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)								
.CHLOROPHYCEAE								
..VOLVOCALES								
...CHLAMYDOMONADACEAE	--	-	--	-	--	-	--	-
CHRYSOPHYTA								
.BACILLARIOPHYCEAE								
..CENTRALES								
...COSCINODISCACEAE								
....CYCLOTELLA	--	-	--	-	5	6	--	-
..PENNALES								
...ACHNANTHACEAE								
....ACHNANTHES	--	-	--	-	--	-	--	-
....COCCONEIS	--	-	7	2	--	-	--	-
....RHOICOSPHENIA	--	-	--	-	--	-	--	-
...CYMBELLACEAE								
....CYMBELLA	--	-	--	-	--	-	--	-
...DIATOMACEAE								
....DIATOMA	--	-	7	2	--	-	--	-
...FRAGILARIACEAE								
....SYNEDRA	6#	33	7	2	--	-	18	8
...GOMPHONEMATACEAE								
....GOMPHONEMA	--	-	--	-	24#	28	45#	21
...MERIDIONACEAE								
....MERIDION	--	-	47	12	19#	22	9	4
...NAVICULACEAE								
....NAVICULA	--	-	7	2	--	-	--	-
...NITZSCHIACEAE								
....NITZSCHIA	6#	33	13	4	39#	44	9	4
CYANOPHYTA (BLUE-GREEN ALGAE)								
.CYANOPHYCEAE								
..HORMOGONALES								
...NOSTOCACEAE								
....ANABAENA	6#	33	160#	42	--	-	--	-
....CYLINDROSPERMUM	--	-	130#	35	--	-	--	-
...OSCILLATORIACEAE								
....LYNGBYA	--	-	--	-	--	-	--	-
....OSCILLATORIA	--	-	--	-	--	-	140#	63

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

09173000 BEAVER CREEK NEAR NORWOOD, CO--Continued

PHYTOPLANKTON DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	APR 12,78		MAY 3,78		JUN 27,78		AUG 22,78	
TIME	0750		0900		0820		1200	
TOTAL CELLS/ML	270		740		250		470	
DIVERSITY: DIVISION	0.0		1.4		0.0		0.0	
.CLASS	0.0		1.4		0.0		0.0	
..ORDER	0.3		1.4		0.0		0.0	
...FAMILY	2.2		1.9		1.7		1.9	
....GENUS	2.2		0.0		1.7		1.9	
ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHLOROPHYTA (GREEN ALGAE)								
.CHLOROPHYCEAE								
..VOLVOCALES								
...CHLAMYDOMONADACEAE	--	-	110#	15	--	-	--	-
CHRYSOPHYTA								
.BACILLARIOPHYCEAE								
..CENTRALES								
...COSCINODISCACEAE								
....CYCLOTELLA	14	5	--	-	--	-	--	-
..PENNALES								
...ACHNANTHACEAE								
....ACHNANTHES	--	-	--	-	23	9	--	-
....COCCONEIS	--	-	--	-	--	-	--	-
....RHOICOSPHENIA	14	5	--	-	--	-	--	-
...CYMBELLACEAE								
....CYMBELLA	--	-	--	-	46#	18	--	-
...DIATOMACEAE								
....DIATOMA	--	-	--	-	--	-	--	-
...FRAGILARIACEAE								
....SYNEDRA	29	11	38	5	--	-	54	11
...GOMPHONEMATACEAE								
....GOMPHONEMA	110#	42	150#	21	46#	18	120#	26
...MERIDIONACEAE								
....MERIDION	43#	16	--	-	--	-	180#	37
...NAVICULACEAE								
....NAVICULA	57#	21	57	8	140#	55	120#	26
...NITZSCHIACEAE								
....NITZSCHIA	--	-	--	-	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)								
.CYANOPHYCEAE								
..HORMOGONALES								
...NOSTOCACEAE								
....ANABAENA	--	-	--	-	--	-	--	-
....CYLINDROSPERMUM	--	-	--	-	--	-	--	-
...OSCILLATORIACEAE								
....LYNGBYA	--	-	380#	51	--	-	--	-
....OSCILLATORIA	--	-	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

09174700 WEST NATURITA CREEK AT UPPER STATION, NEAR NORWOOD, CO

LOCATION.--Lat 37°54'39", long 108°20'08", unsurveyed, San Miguel County, Hydrologic unit 14030003, on left bank 1,000 ft (300 m) downstream from Spectacle Creek and 22 mi (35 km) southwest of Norwood.

DRAINAGE AREA.--7.31 mi² (18.93 km²).

PERIOD OF RECORD.--May 1975 to current year (seasonal record only).

GAGE.--Water-stage recorder. Altitude of gage is 8,180 ft (2,490 m), from topographic map.

REMARKS.--Records good. No diversion above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 96 ft³/s (2.72 m³/s) June 3, 1975, gage height, 2.26 ft (0.695 m); minimum daily, 0.40 ft³/s (0.011 m³/s) Apr. 2-4, July 10, 1977.

EXTREMES FOR CURRENT SEASON.--Maximum discharge, 75 ft³/s (2.12 m³/s) May 16, gage height, 2.13 ft (0.649 m); minimum daily, 1.3 ft³/s (0.037 m³/s) July 27, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							1.6	12	42	6.0		
2							1.5	10	39	5.5		
3							1.6	10	36	5.0		
4							1.8	10	35	4.4		
5							1.7	9.6	32	4.2		
6							1.7	9.2	31	4.0		
7							2.0	8.4	31	3.4		
8							2.2	7.7	30	3.2		
9							2.0	8.8	30	3.0		
10							2.2	11	28	2.9		
11							2.3	13	27	2.9		
12							2.9	15	25	2.9		
13							3.2	21	23	2.8		
14							3.4	33	20	2.4		
15							3.4	52	17	2.2		
16							3.8	60	15	2.3		
17							3.4	52	14	2.4		
18							2.9	40	14	2.8		
19							3.6	42	13	2.2		
20							4.0	45	12	2.0		
21							4.8	45	11	1.8		
22							4.6	45	11	1.8		
23							4.8	51	9.6	1.7		
24							6.3	57	9.2	1.6		
25							8.8	43	8.8	1.6		
26							11	43	8.0	1.5		
27							13	39	7.4	1.3		
28							12	36	7.4	1.4		
29							12	38	7.7	1.5		
30							13	43	7.2	1.3		
31							---	43	---	1.6		
TOTAL							141.5	952.7	601.3	83.6		
MEAN							4.72	30.7	20.0	2.70		
MAX							13	60	42	6.0		
MIN							1.5	7.7	7.2	1.3		
AC-FT							281	1890	1190	166		

09175000 WEST NATURITA CREEK NEAR NORWOOD, CO
(Formerly published as Naturita Creek near Norwood)

LOCATION.--Lat 37°58'33", long 108°19'38", in SW¼NW¼ sec.20, T.43 N., R.13 W., San Miguel County, Hydrologic Unit 14030003, on right bank 500 ft (150 m) downstream from Middle Naturita Creek, 0.4 mi (0.6 km) downstream from Miramonte Reservoir, and 11 mi (18 km) south of Norwood.

DRAINAGE AREA.--53.0 mi² (137.3 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1940 to September 1952, April 1975 to current year. Prior to April 1975, published as "Naturita Creek near Norwood." Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Altitude of gage is 7,601 ft (2,317 m), from topographic map.

REMARKS.--Records good. Many small diversions above station for irrigation of few hundred acres above and below station and diversion by Lilyland Canal to Dry Creek basin for few hundred acres; flow regulated by Miramonte Reservoir, capacity, 6,800 acre-ft (8.38 hm³). Small Colorado Fish and Game Department lake would have very little affect on flow.

COOPERATION.--Records collected and computed by Colorado Division of Water Resources and reviewed by Geological Survey.

AVERAGE DISCHARGE.--15 years (water years 1941-52, 1976-78), 9.07 ft³/s (0.257 m³/s), 6,570 acre-ft/yr (8.10 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 943 ft³/s (26.7 m³/s) July 24, 1945, gage height, 5.19 ft (1.582 m), site and datum then in use, from rating curve extended above 200 ft³/s (5.7 m³/s), on basis of slope-area measurement at gage height 4.80 ft (1.463 m); no flow at times in 1945, 1948, 1950-51.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 70 ft³/s (1.98 m³/s) at 1400 Apr. 1, gage height, 4.04 ft (1.231 m); minimum daily, 0.47 ft³/s (0.013 m³/s) Oct. 4, 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.48	.55	.54	.60	.68	.66	27	3.8	20	1.6	1.5	.92
2	.48	.55	.56	.60	.68	.66	8.1	3.0	20	1.6	1.5	.92
3	.48	.55	.56	.60	.68	.68	6.0	3.2	19	1.5	1.3	.92
4	.47	.55	.56	.60	.68	.76	4.6	3.5	18	1.5	1.3	.92
5	.47	.55	.56	.60	.68	.80	3.6	5.0	18	1.5	1.2	.92
6	.48	.62	.56	.60	.64	.78	3.2	5.8	16	1.5	1.2	.92
7	.55	.62	.56	.60	.64	.80	3.4	5.4	14	1.5	1.2	.92
8	.49	.60	.56	.62	.64	.84	3.0	13	13	1.5	1.2	.92
9	.49	.59	.56	.62	.62	.80	3.4	14	12	1.5	1.2	.92
10	.49	.59	.56	.62	.64	.88	3.5	13	11	1.6	1.2	.92
11	.49	.59	.56	.62	.64	.84	2.7	12	9.9	1.6	1.2	.92
12	.49	.58	.56	.62	.64	.78	2.7	9.7	7.6	1.6	1.1	.92
13	.49	.58	.56	.62	.64	.78	2.4	8.8	6.0	1.6	1.1	.88
14	.49	.58	.56	.66	.64	.76	2.1	8.8	4.6	1.6	1.0	.88
15	.49	.57	.56	.66	.64	.74	2.1	9.4	3.4	1.6	1.0	.88
16	.49	.57	.55	.66	.64	.74	2.1	12	2.5	1.6	1.0	.88
17	.49	.56	.57	.62	.60	.74	2.0	22	2.0	1.7	.96	.96
18	.49	.56	.58	.68	.60	.80	2.1	31	1.9	1.7	.96	1.0
19	.49	.56	.59	.68	.60	.84	2.2	35	1.8	1.6	.92	.96
20	.49	.54	.58	.68	.60	1.1	2.1	36	1.8	1.6	.92	.92
21	.49	.54	.58	.68	.60	1.6	2.0	37	1.8	1.6	.92	.88
22	.49	.54	.58	.68	.60	3.6	2.1	32	1.8	1.6	.92	.88
23	.49	.54	.58	.68	.60	3.3	2.0	24	1.8	1.6	.88	.88
24	.48	.54	.58	.72	.60	3.2	2.2	22	1.8	1.6	.88	.84
25	.49	.54	.58	.72	.60	3.0	2.2	24	1.6	1.6	.88	.84
26	.49	.54	.58	.72	.60	3.5	2.4	27	1.6	1.6	.88	.84
27	.49	.54	.58	.72	.60	5.3	2.8	28	1.6	1.6	.84	.84
28	.49	.54	.60	.72	.60	8.1	2.9	26	1.6	1.6	.84	.84
29	.52	.54	.60	.72	---	11	3.0	25	1.7	1.6	.84	.84
30	.55	.54	.60	.68	---	17	3.8	23	1.7	1.6	.84	.84
31	.54	---	.60	.68	---	15	---	21	---	1.7	.92	---
TOTAL	15.30	16.86	17.71	20.28	17.62	90.38	113.7	543.4	219.5	49.2	32.60	26.92
MEAN	.49	.56	.57	.65	.63	2.92	3.79	17.5	7.32	1.59	1.05	.90
MAX	.55	.62	.60	.72	.68	17	27	37	20	1.7	1.5	1.0
MIN	.47	.54	.54	.60	.60	.66	2.0	3.0	1.6	1.5	.84	.84
AC-FT	30	33	35	40	35	179	226	1080	435	98	65	53

CAL YR 1977 TOTAL 270.37 MEAN .74 MAX 6.3 MIN .47 AC-FT 536
WTR YR 1978 TOTAL 1163.47 MEAN 3.19 MAX 37 MIN .47 AC-FT 2310

09175000 WEST NATURITA CREEK NEAR NORWOOD, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1977 to September 1978.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI FECAL, (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)
DEC											
07...	0830	.56	1000	8.0	2.0	1.7	10.1	--	4	7	400
JAN											
03...	1505	.60	1000	7.9	1.0	--	10.3	29	<1	<1	410
FEB											
08...	1145	E.64	900	8.0	3.0	--	10.3	15	<1	<1	430
MAR											
01...	1100	.68	800	7.9	4.0	--	9.8	0	35	>400	400
APR											
12...	0900	2.7	850	7.1	7.0	--	9.2	18	K1	26	370
MAY											
03...	1100	3.6	750	7.4	8.0	--	9.0	20	K7	K17	370
22...	1000	40	900	8.5	14.0	--	8.0	--	K3	K4	--
JUN											
27...	0730	1.6	850	7.7	13.0	--	7.7	29	K270	100	380
JUL											
31...	1030	1.6	854	8.5	12.0	--	8.0	16	100	K53	380
AUG											
22...	1000	.92	900	8.5	14.0	3.3	8.0	23	--	--	360
28...	1030	.84	750	8.6	16.0	--	7.5	47	K25	<1	330
SEP											
26...	0800	.84	900	8.0	11.0	.50	8.3	17	K60	K40	360

DATE	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
DEC											
07...	250	79	48	54	1.2	3.8	180	0	150	320	9.8
JAN											
03...	270	83	50	51	1.1	3.6	180	0	150	340	9.9
FEB											
08...	260	91	49	49	1.0	3.6	210	0	170	330	9.9
MAR											
01...	230	84	45	45	1.0	3.2	200	0	160	280	9.7
APR											
12...	210	86	38	34	.8	2.9	200	0	160	260	7.4
MAY											
03...	200	84	39	33	.7	3.4	210	0	170	240	7.7
22...	--	--	--	--	--	--	--	--	--	--	--
JUN											
27...	220	86	41	47	1.0	3.7	200	0	164	300	8.6
JUL											
31...	230	79	44	46	1.0	3.7	180	0	150	280	8.7
AUG											
22...	230	71	44	47	1.1	3.7	160	1	130	290	9.7
28...	210	64	41	51	1.2	3.7	150	0	120	310	8.8
SEP											
26...	220	70	44	52	1.2	3.6	160	0	130	310	10

E ESTIMATED.

K BASED ON NON-IDEAL COLONY COUNT.

09175000 WEST NATURITA CREEK NEAR NORWOOD, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)
DEC 07...	.1	4.5	636	608	.96	.06	.02	.26	.28	.34
JAN 03...	.2	5.2	664	632	1.08	.19	.09	.21	.30	.49
FEB 08...	.3	5.5	677	642	1.06	.06	.02	.24	.26	.32
MAR 01...	.2	5.6	615	572	1.13	.06	.01	.05	.06	.12
APR 12...	.2	7.5	506	535	3.70	.03	.00	.36	.36	.39
MAY 03...	.2	8.7	548	520	5.33	.01	.01	.48	.49	.50
22...	--	--	--	--	--	--	--	--	--	--
JUN 27...	.2	6.2	625	591	2.70	.02	.01	.23	.24	.26
JUL 31...	.3	5.3	602	550	2.60	.01	.00	1.1	1.1	1.1
AUG 22...	.2	4.8	576	551	1.43	.01	.01	.57	.58	.59
28...	.3	4.4	583	557	1.32	.01	.01	.28	.29	.30
SEP 26...	.2	4.6	608	573	1.38	.01	.00	.35	.35	.36

DATE	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	BORON, DISSOLVED (UG/L AS B)	IRON, DISSOLVED (UG/L AS FE)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C)	PHYTOPLANKTON, TOTAL (CELLS PER ML)	CHLOR-A PERIPHYTON CHROMOGRAPHIC FLUOROM (MG/M2)	CHLOR-B PERIPHYTON CHROMOGRAPHIC FLUOROM (MG/M2)	BIOMASS CHLOROPHYLL RATIO PERIPHYTON (UNITS)
DEC 07...	.00	.00	70	30	--	--	37	3.18	.760	371
JAN 03...	.01	.02	60	30	--	--	96	--	--	--
FEB 08...	.01	.01	50	20	6.3	--	160	--	--	--
MAR 01...	.02	.01	50	40	6.6	.3	420	.360	.000	875
APR 12...	.02	.00	50	20	7.8	.2	860	--	--	--
MAY 03...	.04	.04	60	30	6.3	.4	770	--	--	--
22...	--	--	--	--	--	--	350	--	--	--
JUN 27...	.01	.00	80	40	5.3	.4	620	--	--	--
JUL 31...	.00	.00	80	20	5.6	.1	--	--	--	--
AUG 22...	.02	.00	70	20	8.2	.7	--	--	--	--
28...	.01	.01	70	<10	7.9	.5	--	--	--	--
SEP 26...	.01	.00	90	20	5.7	.4	--	--	--	--

09175000 WEST NATURITA CREEK NEAR NORWOOD, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SOLIDS, RESIDUE AT 105 DEG. C, DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	BARIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS BA)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)
DEC 07...	0830	700	3	0	2	1	--	100	0	--	0
MAR 01...	1100	--	--	0	--	1	8	--	200	1200	--
AUG 22...	1000	615	9	0	1	1	10	0	100	120	0
28...	1030	--	--	8	--	1	10	--	70	60	--
SEP 26...	0800	--	--	--	0	--	--	0	--	--	0

DATE	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	BERYL-LIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COBALT, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CO)
DEC 07...	0	--	0	0	--	10	8	--	0	0	--
MAR 01...	0	10	--	0	5	--	0	60	--	4	10
AUG 22...	0	1	--	0	0	20	0	4	0	0	8
28...	<1	1	--	<1	0	--	10	2	--	<1	10
SEP 26...	--	--	2	--	--	10	--	--	2	--	--

DATE	COPPER, DIS-SOLVED (UG/L AS CU)	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB)	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MANGA-NESE, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)
DEC 07...	1	--	2	1	--	40	40	140	140	--	.0
MAR 01...	1	9	--	2	0	--	40	--	110	3000	--
AUG 22...	3	8	--	0	10	30	30	30	20	180	.0
28...	1	7	--	0	10	--	40	--	20	360	--
SEP 26...	--	--	8	--	--	40	--	40	--	--	.0

DATE	MERCURY DIS-SOLVED (UG/L AS HG)	MERCURY RECOV. FM BOT-TOM MA-TERIAL (UG/L AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	MOLYB-DENUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	NICKEL, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SELE-NIUM, TOTAL IN BOT-TOM MA-TERIAL (UG/G)
DEC 07...	.0	--	4	1	--	4	2	--	0	0	--
MAR 01...	.0	.0	--	2	0	--	3	2	--	0	0
AUG 22...	.0	.0	6	1	1	--	0	10	0	0	0
28...	.0	.0	--	4	6	--	1	4	--	0	0
SEP 26...	--	--	5	--	--	7	--	--	0	--	--

09175000 WEST NATURITA CREEK NEAR NORWOOD, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	GROSS ALPHA, DISSOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DISSOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DISSOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)
DEC										
07...	.0	10	10	--	<10	<.4	7.5	.5	6.4	.5
MAR										
01...	.0	--	10	390	--	--	--	--	--	--
AUG										
22...	.0	10	20	25	<5.5	.5	10	.6	8.8	3.6
28...	.1	--	<3	20	--	--	--	--	--	--
SEP										
26...	--	10	--	--	<5.0	<.4	7.9	<.4	7.3	<.4

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY) (80155)
DEC				
07...	0830	.43	7	.01
JAN				
03...	1505	.58	20	.03
FEB				
08...	1145	.58	14	.02
MAR				
01...	1100	.68	10	.02
APR				
12...	0900	2.7	15	.11
AUG				
28...	1030	1.1	1	.00

09175000 WEST NATURITA CREEK NEAR NORWOOD, CO--Continued

PHYTOPLANKTON DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	DEC 7.77		JAN 3.78		FEB 8.78		MAR 1.78	
TIME	0830		1505		1145		1100	
TOTAL CELLS/ML	37		96		160		420	
DIVERSITY: DIVISION	0.0		0.0		0.0		0.5	
.CLASS	0.0		0.0		0.0		0.5	
..ORDER	0.0		0.0		0.0		0.5	
...FAMILY	2.3		2.5		2.6		2.4	
....GENUS	2.3		2.5		3.0		2.4	
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)								
.CHLOROPHYCEAE								
..CHLOROCOCCALES								
...CHARACIACEAE								
....SCHROEDERIA	--	-	--	-	--	-	20	5
...OOCYSTACEAE								
....ANKISTRODESMUS	--	-	--	-	--	-	--	-
..VOLVOCALES								
...CHLAMYDOMONADACEAE								
....CHLAMYDOMONAS	--	-	--	-	--	-	20	5
..ZYGNEMATALES								
...ZYGNEMATACEAE								
....MOUGEOTIA	--	-	--	-	--	-	--	-
CHRYSOPHYTA								
.BACILLARIOPHYCEAE								
..PENNALES								
...ACHNANTHACEAE								
....ACHNANTHES	--	-	--	-	5	3	--	-
....COCCONEIS	7#	20	23#	24	15	9	40	10
....RHOICOSPHENIA	--	-	--	-	10	6	--	-
...CYMBELLACEAE								
....CYMBELLA	--	-	17#	18	15	9	--	-
...DIATOMACEAE								
....DIATOMA	7#	20	6	6	--	-	--	-
...FRAGILARIACEAE								
....SYNEDRA	--	-	23#	24	50#	30	--	-
...GOMPHONEMATACEAF								
....GOMPHONEMA	7#	20	11	12	15	9	40	10
...NAVICULACEAE								
....GYROSIGMA	--	-	--	-	5	3	--	-
....NAVICULA	7#	20	17#	18	25#	15	160#	38
...NITZSCHIACEAE								
....NITZSCHIA	7#	20	--	-	20	12	100#	24
...SURIRELLACEAE								
....SURIRELLA	--	-	--	-	5	3	40	10
CYANOPHYTA (BLUE-GREEN ALGAE)								
.CYANOPHYCEAE								
..HORMOGONALES								
...OSCILLATORIACEAE								
....OSCILLATORIA	--	-	--	-	--	-	--	-
..HORMOGONALES	--	-	--	-	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)								
.CRYPTOPHYCEAE								
..CRYPTOMONIDALES								
...CRYPTOCHRYSIDACEAE								
....CHROOMONAS	--	-	--	-	--	-	--	-
...CRYPTOMONODACEAE								
....CRYPTOMONAS	--	-	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

09175000 WEST NATURITA CREEK NEAR NORWOOD, CO--Continued

PHYTOPLANKTON DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	APR 12,78	MAY 3,78	MAY 22,78	JUN 27,78
TIME	0900	1100	1000	0730
TOTAL CELLS/ML	860	770	350	620
DIVERSITY: DIVISION	1.1	0.7	1.4	1.0
.CLASS	1.1	0.7	1.4	1.0
..ORDER	1.1	0.7	1.6	1.0
...FAMILY	2.2	0.0	2.3	1.9
....GENUS	2.2	0.0	2.3	1.9

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)								
.CHLOROPHYCEAE								
..CHLOROCOCCALES								
...CHARACIACEAE								
....SCHROEDERIA	--	-	--	-	--	-	--	-
...OOCYSTACEAE								
....ANKISTRODESMUS	14	2	--	-	68#	19	--	-
..VOLVOCALES								
...CHLAMYDOMONADACEAE								
....CHLAMYDOMONAS	--	-	--	-	--	-	--	-
..ZYGNEMATALES								
...ZYGNEMATACEAE								
....MOUGEOTIA	--	-	--	-	14	4	--	-
CHRYSOPHYTA								
.BACILLARIOPHYCEAE								
..PENNALES								
...ACHNANTHACEAE								
....ACHNANTHES	--	-	--	-	--	-	--	-
....COCCONEIS	14	2	--	-	--	-	23	4
....RHOICOSPHENIA	--	-	--	-	--	-	--	-
...CYMBELLACEAE								
....CYMBELLA	14	2	--	-	--	-	23	4
...DIATOMACEAE								
....DIATOMA	--	-	--	-	--	-	23	4
...FRAGILARIACEAE								
....SYNEDRA	110	13	37	5	54#	15	--	-
...GOMPHONEMATACEAE								
....GOMPHONEMA	43	5	--	-	--	-	23	4
...NAVICULACEAE								
....GYROSIGMA	--	-	--	-	--	-	--	-
....NAVICULA	130	15	150#	20	--	-	46	7
...NITZSCHIACEAE								
....NITZSCHIA	43	5	450#	59	14	4	120#	19
...SURIRELLACEAE								
....SURIRELLA	43	5	--	-	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)								
.CYANOPHYCEAE								
..HORMOGONALES								
...OSCILLATORIACEAE								
....OSCILLATORIA	440#	52	--	-	--	-	370#	59
..HORMOGONALES	--	-	130#	17	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)								
.CRYPTOPHYCEAE								
..CRYPTOMONIDALES								
...CRYPTOCHRYSIDACEAE								
....CHROOMONAS	--	-	--	-	110#	31	--	-
...CRYPTOMONODACEAE								
....CRYPTOMONAS	--	-	--	-	95#	27	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

09175200 LILYLANDS CANAL NEAR NORWOOD, CO

LOCATION.--Lat 38°01'24", long 108°23'18", in SW¼SW¼ sec.35, T.44 N., R.14 W., San Miguel County, Hydrologic Unit 14030003, on left bank 500 ft (150 m) north of Uncompahgre National Forest Boundary and 8.5 mi (13.7 km) southwest of Norwood.

PERIOD OF RECORD.--May 1975 to current year (irrigation season only).

GAGE.--Water-stage recorder. Altitude of gage is 7,940 ft (2,420 m), from topographic map.

REMARKS.--Records good. Lilyland Canal diverts water from Naturita Creek and tributaries for irrigation of 500 acres east of Dry Creek basin. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 44 ft³/s (1.25 m³/s) May 22, 1976; no flow many days each year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							18	22	29	9.4	4.8	.00
2							10	21	29	9.2	4.6	.00
3							7.0	21	29	9.1	4.4	.00
4							5.5	23	28	9.1	4.2	.00
5							4.8	22	31	9.1	3.9	.00
6							5.5	22	31	8.9	3.8	.00
7							6.5	21	31	8.8	3.6	.00
8							6.5	26	31	8.7	3.8	.00
9							5.5	23	31	8.7	3.3	.00
10							3.8	24	31	8.2	3.3	.00
11							3.8	26	30	7.0	3.3	.00
12							6.2	26	28	6.2	3.4	.00
13							7.4	26	28	6.1	3.0	.00
14							6.3	31	28	5.9	2.9	.00
15							6.7	36	27	5.9	2.9	.00
16							6.5	36	27	5.9	2.7	.00
17							5.0	33	26	5.9	2.7	.00
18							3.2	26	24	5.9	1.5	.00
19							4.2	25	15	5.5	1.1	.00
20							5.2	25	14	5.2	1.1	.00
21							6.5	26	13	5.0	1.1	.00
22							5.4	27	13	4.9	.73	.00
23							5.1	27	13	4.9	.52	.00
24							6.2	26	13	4.6	.28	.00
25							7.9	26	13	4.9	.02	.00
26							14	24	10	5.0	.00	.00
27							20	26	9.5	4.8	.00	.00
28							13	30	9.6	5.1	.00	.00
29							14	30	9.8	4.8	.00	.00
30							25	30	9.5	4.5	.00	.00
31							---	30	---	4.8	.00	---
TOTAL							244.7	817	661.4	202.0	66.95	.00
MEAN							8.16	26.4	22.0	6.52	2.16	.000
MAX							25	36	31	9.4	4.8	.00
MIN							3.2	21	9.5	4.5	.00	.00
AC-FT							485	1620	1310	401	133	.00

09175400 MAVERICK DRAW NEAR NORWOOD, CO

LOCATION.--Lat 38°10'32", long 108°19'52", in SW¼SW¼ sec.5, T.45 N., R.13 W., Montrose County, Hydrologic Unit 14030003, on left bank 2.0 mi (3.2 km) upstream from Smugglers ditch headgate and 3.5 mi (5.6 km) northwest of Norwood.

DRAINAGE AREA.--41.3 mi² (107.0 km²).

PERIOD OF RECORD.--April 1975 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,660 ft (2,030 m), from topographic map.

REMARKS.--Records good. Natural flow of stream affected by diversions for irrigation of 72 acres (291,000 m²) above station and 35 acres (142,000 m²) below. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 40 ft³/s (1.13 m³/s) Feb. 9, 1976, gage height, 3.45 ft (1.052 m); minimum daily, 0.03 ft³/s (0.001 m³/s) Aug. 29, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 10 ft³/s (0.28 m³/s) Oct. 7, gage height, 2.83 ft (0.863 m); maximum gage height 3.02 ft (0.902 m) July 18 (backwater from moss); minimum daily, 0.11 ft³/s (0.003 m³/s) Oct. 1, 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.11	.35	.44	.38	.52	1.3	1.5	.86	5.2	4.2	1.7	1.1
2	.14	.35	.48	.40	.52	1.7	2.0	1.0	4.8	2.8	2.0	1.0
3	.13	.35	.52	.48	.56	2.3	1.9	.92	4.2	2.7	2.6	.98
4	.12	.35	.56	.52	.60	2.4	1.6	.98	5.0	2.3	3.4	.86
5	.11	.32	.56	.52	.64	2.3	1.6	1.1	5.8	2.0	3.3	.86
6	.20	.44	.52	.52	.68	2.2	1.5	1.5	5.5	1.9	3.1	.92
7	1.5	.56	.56	.44	.68	2.1	1.3	1.6	4.8	1.6	2.7	.86
8	.22	.44	.56	.48	.72	2.0	1.4	1.5	5.2	2.6	2.2	.92
9	.18	.35	.52	.52	.56	2.0	1.6	1.3	6.3	2.9	2.2	.86
10	.15	.35	.56	.56	.64	2.0	1.7	1.1	7.0	2.6	2.0	.98
11	.15	.32	.56	.56	.76	2.0	1.9	2.0	6.0	3.9	2.3	.92
12	.15	.30	.60	.56	.68	2.2	1.7	1.3	5.0	3.8	2.7	.76
13	.18	.30	.56	.52	.64	2.1	1.4	1.3	5.2	3.0	2.7	.76
14	.18	.30	.56	.52	.68	2.0	1.3	1.3	6.1	2.8	2.2	.86
15	.15	.32	.60	.60	.68	1.7	1.2	1.0	6.0	2.7	1.9	.86
16	.20	.38	.56	.56	.68	1.5	1.2	.92	5.8	4.5	2.2	.80
17	.20	.56	.56	.56	.56	1.5	1.2	.86	5.7	5.1	1.9	.86
18	.20	.52	.56	.56	.60	1.6	1.1	.92	6.6	7.2	1.2	.86
19	.22	.48	.48	.56	.60	1.6	1.1	.86	6.5	5.8	1.5	.86
20	.22	.52	.44	.56	.64	1.6	1.0	.86	4.7	4.5	1.2	.86
21	.22	.52	.35	.56	.64	1.5	.86	1.0	5.2	3.3	.92	.86
22	.22	.56	.38	.60	.68	1.7	.86	1.3	5.8	3.2	.68	.86
23	.25	.52	.38	.60	.72	1.8	.80	1.5	5.4	2.4	.48	.86
24	.25	.52	.38	.52	.80	1.8	.80	1.2	5.8	2.6	.64	.68
25	.25	.52	.35	.48	.86	1.6	.86	.48	5.2	2.3	.68	.86
26	.28	.56	.38	.56	.98	1.5	.80	2.0	4.3	1.9	.92	.86
27	.25	.56	.38	.56	.98	1.4	.76	3.4	3.9	1.7	1.2	.64
28	.22	.56	.40	.56	1.2	1.3	.76	3.6	3.9	3.0	1.2	.60
29	.25	.48	.40	.56	---	1.2	.72	3.2	5.4	2.2	1.1	.40
30	.30	.48	.44	.56	---	1.1	.76	3.6	5.5	2.1	1.1	.40
31	.32	---	.44	.60	---	1.1	---	5.0	---	1.9	1.1	---
TOTAL	7.52	13.14	15.04	16.54	19.50	54.1	37.18	49.46	161.8	95.5	55.02	24.76
MEAN	.24	.44	.49	.53	.70	1.75	1.24	1.60	5.39	3.08	1.77	.83
MAX	1.5	.56	.60	.60	1.2	2.4	2.0	5.0	7.0	7.2	3.4	1.1
MIN	.11	.30	.35	.38	.52	1.1	.72	.48	3.9	1.6	.48	.40
AC-FT	15	26	30	33	39	107	74	98	321	189	109	49

CAL YR 1977 TOTAL 270.55 MEAN .74 MAX 2.5 MIN .03 AC-FT 537
WTR YR 1978 TOTAL 549.56 MEAN 1.51 MAX 7.2 MIN .11 AC-FT 1090

DOLORES RIVER BASIN

09175500 SAN MIGUEL RIVER AT NATURITA, CO

LOCATION.--Lat 38°13'04", long 108°33'57", in NE¼NW¼ sec.30, T.46 N., R.15 W., Montrose County, Hydrologic Unit 14030003, on left bank 20 ft (6 m) downstream from bridge on State Highway 97 in Naturita and 1.2 mi (1.9 km) downstream from Naturita Creek.

DRAINAGE AREA.--1,069 mi² (2,769 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1917 to September 1929, May 1940 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WRD Colo. 1972: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 5,392.85 ft (1,643.74 m), National Geodetic Vertical Datum of 1929. Apr. 26, 1918, to Sept. 2, 1926, nonrecording gage, and Sept. 3, 1926, to Sept. 30, 1929, water-stage recorder, at same site at different datums. Oct. 1, 1940, to Dec. 9, 1941, nonrecording gage at same site and datum.

COOPERATION.--Records collected and computed by Colorado Division of Water Resources and reviewed by Geological Survey.

REMARKS.--Records good. Natural flow of stream affected by storage reservoirs, diversions for irrigation of about 22,000 acres (89.0 km²) above station and 4,000 acres (16.2 km²) below, and return flow from irrigated areas.

AVERAGE DISCHARGE.--50 years (water years 1918-29, 1941-78), 329 ft³/s (9.317 m³/s), 238,400 acre-ft/yr (294 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,100 ft³/s (201 m³/s) Apr. 15, 1942, gage height, 9.80 ft (2.987 m), from rating curve extended above 3,800 ft³/s (110 m³/s); minimum daily, 1.6 ft³/s (0.045 m³/s) July 16, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,640 ft³/s (74.8 m³/s) at 0030 Apr. 27, gage height, 5.75 ft (1.753 m), only peak above base of 1,800 ft³/s (51 m³/s); minimum daily, 6.7 ft³/s (0.190 m³/s) Sept. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	69	55	56	70	75	836	753	1120	710	150	10
2	13	62	52	51	52	83	635	700	1060	685	130	8.3
3	23	56	57	70	42	83	508	645	1050	685	110	8.3
4	59	56	56	70	60	85	477	620	1080	616	90	7.5
5	60	57	57	77	64	70	566	516	1010	544	80	6.7
6	66	68	55	79	70	70	473	534	944	485	70	7.1
7	235	76	48	80	79	41	657	534	944	457	60	7.5
8	123	69	60	76	77	20	974	485	962	449	50	10
9	101	72	52	85	61	19	866	682	1020	401	45	9.6
10	80	56	47	76	69	22	562	1200	1210	473	52	8.3
11	75	39	64	75	79	30	562	1060	1340	485	44	7.9
12	73	10	59	86	65	39	992	854	1360	473	44	8.3
13	72	8.7	56	82	59	77	1200	797	1340	473	42	10
14	66	8.3	47	80	60	76	1070	908	1340	405	37	9.6
15	68	8.3	61	93	66	69	1230	1100	1420	369	40	11
16	68	8.3	64	93	70	62	1330	1260	1460	401	32	10
17	66	14	44	89	64	66	1060	1280	1250	409	26	12
18	62	62	44	85	55	72	660	974	1120	445	24	13
19	62	62	49	70	64	72	770	842	1100	389	22	16
20	61	69	29	73	65	75	854	878	1150	334	18	15
21	62	56	50	77	70	82	1070	920	1120	320	17	19
22	62	76	75	61	68	94	792	902	1100	295	15	20
23	61	72	135	56	62	112	635	920	1060	256	14	16
24	52	66	119	59	66	115	878	974	1110	232	14	12
25	46	62	93	54	68	104	1140	962	1250	216	10	13
26	48	60	65	59	72	97	1350	878	1180	203	24	12
27	46	60	71	72	70	110	1590	968	896	196	34	12
28	46	60	127	60	73	164	1030	884	872	188	19	10
29	65	59	121	56	---	200	938	797	932	186	13	11
30	88	57	110	65	---	283	884	824	742	180	9.6	10
31	79	---	80	64	---	413	---	1030	---	170	11	---
TOTAL	2102	1558.6	2102	2229	1840	2980	26589	26681	33542	12130	1346.6	331.1
MEAN	67.8	52.0	67.8	71.9	65.7	96.1	886	861	1118	391	43.4	11.0
MAX	235	76	135	93	79	413	1590	1280	1460	710	150	20
MIN	13	8.3	29	51	42	19	473	485	742	170	9.6	6.7
AC-FT	4170	3090	4170	4420	3650	5910	52740	52920	66530	24060	2670	657

CAL YR 1977 TOTAL 23645.8 MEAN 64.8 MAX 440 MIN 1.6 AC-FT 46900
WTR YR 1978 TOTAL 113431.3 MEAN 311 MAX 1590 MIN 6.7 AC-FT 225000

09175500 SAN MIGUEL RIVER AT NATURITA, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1977 to September 1978.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI FECAL, (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)
DEC											
06...	1410	69	620	8.1	3.0	.40	11.4	--	K8	64	310
JAN											
03...	1345	65	740	8.4	.0	--	--	--	--	--	370
04...	1500	59	690	7.8	3.0	--	10.7	20	<1	120	320
FEB											
07...	1445	E79	620	8.0	5.0	--	10.3	13	<1	42	330
MAR											
01...	0730	66	640	8.1	3.0	--	10.8	70	99	K280	330
APR											
12...	1045	890	270	7.6	7.0	--	10.2	32	40	80	120
MAY											
02...	1110	736	290	7.5	8.0	--	9.8	26	56	96	140
22...	1640	890	350	8.5	15.0	65	8.3	25	K8	K26	160
JUN											
26...	1500	1180	210	7.6	16.0	--	8.8	24	190	82	92
JUL											
31...	1250	E170	560	7.6	20.0	--	7.9	7	K30	150	230
AUG											
28...	1330	19	1100	8.7	23.0	--	7.2	49	K17	K35	540
SEP											
25...	1345	14	1600	8.3	20.0	.50	7.6	20	K25	K100	740

DATE	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
DEC											
06...	180	90	20	8.4	.2	1.7	150	0	120	190	5.0
JAN											
03...	240	100	28	26	.6	1.9	150	0	120	280	7.1
04...	200	93	22	20	.5	1.7	150	0	120	230	5.3
FEB											
07...	210	91	25	23	.5	1.9	150	0	120	230	6.5
MAR											
01...	210	89	25	24	.6	1.7	140	0	110	240	6.6
APR											
12...	47	35	8.0	9.7	.4	2.5	90	0	74	79	2.5
MAY											
02...	57	42	8.4	6.7	.2	1.9	100	0	82	62	2.4
22...	67	47	10	8.2	.3	1.4	110	1	92	73	2.1
JUN											
26...	38	30	4.2	3.7	.2	.7	66	0	54	47	1.6
JUL											
31...	140	70	14	11	.3	1.6	110	0	90	150	2.9
AUG											
28...	400	140	45	37	.7	3.0	160	0	130	460	5.5
SEP											
25...	600	180	71	54	.9	4.2	170	0	140	660	.5

E ESTIMATED.

K BASED ON NON-IDEAL COLONY COUNT.

09175500 SAN MIGUEL RIVER AT NATURITA, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)
DEC											
06...	.1	7.5	420	397	78.2	.18	.00	.13	.13	.31	.00
JAN											
03...	.4	9.1	--	528	92.7	--	--	--	--	--	--
04...	.1	8.9	460	455	73.3	.32	.07	.48	.55	.87	.04
FEB											
07...	.4	8.3	470	460	95.2	.30	.03	.14	.17	.47	.06
MAR											
01...	.2	7.7	450	464	80.2	.18	.00	.01	.01	.19	.06
APR											
12...	.1	8.0	152	189	365	.08	.03	.64	.67	.75	.13
MAY											
02...	.1	8.3	188	181	374	.08	.01	.50	.51	.59	.10
22...	.1	7.9	204	205	490	.08	.00	.68	.68	.76	.07
JUN											
26...	.1	6.0	137	126	436	.13	.04	.20	.24	.37	.27
JUL											
31...	.3	7.4	315	311	125	.04	.01	.31	.32	.36	.00
AUG											
28...	.7	11	827	781	42.4	.01	.01	.12	.13	.14	.02
SEP											
25...	.7	9.2	1150	1060	43.5	.02	.01	.32	.33	.35	.01

DATE	PHOSPHORUS, DISSOLVED (MG/L AS P)	BORON, DISSOLVED (UG/L AS B)	IRON, DISSOLVED (UG/L AS FE)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C)	PHYTOPLANKTON, TOTAL (CELLS PER ML)	PERIPHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	PERIPHYTON BIOMASS ASH WEIGHT G/SQ M	CHLOR-A PERIPHYTON CHROMOGRAPHIC FLUOROM (MG/M2)	CHLOR-B PERIPHYTON CHROMOGRAPHIC FLUOROM (MG/M2)	BIOMASS CHLOROPHYLL RATIO PERIPHYTON (UNITS)
DEC											
06...	.45	40	20	--	--	370	--	--	1.49	.000	1477
JAN											
03...	--	--	20	--	--	--	--	--	--	--	--
04...	.00	40	20	--	--	910	--	--	--	--	--
FEB											
07...	.01	40	10	5.2	--	1300	--	--	--	--	--
MAR											
01...	.01	40	20	3.9	.4	18000	--	--	.590	.060	814
APR											
12...	.02	50	70	9.1	.8	1500	--	--	--	--	--
MAY											
02...	.02	40	20	6.0	2.4	400	--	--	--	--	--
22...	.00	40	20	6.3	.3	220	.079	.079	.000	.000	--
JUN											
26...	.01	40	60	2.2	--	280	--	--	--	--	--
JUL											
31...	.00	40	10	5.3	--	--	--	--	--	--	--
AUG											
28...	.01	120	<10	5.8	--	--	--	--	--	--	--
SEP											
25...	.01	230	40	5.4	.4	--	--	--	--	--	--

09175500 SAN MIGUEL RIVER AT NATURITA, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SOLIDS, RESIDUE AT 105 DEG. C, DISSOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BARIUM, DISSOLVED (UG/L AS BA)	BARIUM, RECOV. FM BOTTOM MATERIAL (UG/G AS BA)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)
DEC 06...	1410	460	30	0	2	1	--	100	100	--	0
JAN 03...	1345	--	--	--	--	--	--	--	--	--	--
MAR 01...	0730	--	--	0	--	1	4	--	200	2000	--
MAY 22...	1640	224	87	30	1	.	7	300	100	80	0
AUG 28...	1330	--	--	20	--	5	22	--	70	100	--
SEP 25...	1345	--	--	--	1	--	--	0	--	--	0

DATE	BERYLLIUM, DISSOLVED (UG/L AS BE)	BERYLLIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, DISSOLVED (UG/L AS CO)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)
DEC 06...	0	--	0	0	--	10	0	--	0	0	--
JAN 03...	--	--	--	--	--	--	--	--	--	--	--
MAR 01...	0	10	--	0	10	--	0	30	--	6	3
MAY 22...	0	1	--	0	0	35	0	2	0	0	8
AUG 28...	<1	0	--	<1	4	--	10	2	--	<1	10
SEP 25...	--	--	1	--	--	0	--	--	2	--	--

DATE	COPPER, DISSOLVED (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	LITHIUM TOTAL RECOVERABLE (UG/L AS LI)	LITHIUM DISSOLVED (UG/L AS LI)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)
DEC 06...	1	--	5	0	--	20	20	120	60	--	.0
JAN 03...	--	--	--	--	--	-	--	--	50	--	--
MAR 01...	1	17	--	2	500	--	30	--	40	4100	--
MAY 22...	10	22	--	0	70	10	10	110	20	600	.0
AUG 28...	4	39	--	1	160	--	60	--	40	1100	--
SEP 25...	--	--	5	--	--	80	--	30	--	--	.0

09175500 SAN MIGUEL RIVER AT NATURITA, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	MERCURY DISSOLVED (UG/L AS HG)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/L AS HG)	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	MOLYBDENUM, RECOV. FM BOTTOM MATERIAL (UG/G)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, DISSOLVED (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)
DEC											
06...	.0	--	6	3	--	5	1	--	0	1	--
JAN											
03...	--	--	--	--	--	--	--	--	--	--	--
MAR											
01...	.0	.0	--	4	1	--	5	2	--	1	0
MAY											
22...	.0	.0	5	0	1	--	0	8	0	0	0
AUG											
28...	.0	.0	--	10	13	--	2	4	--	0	0
SEP											
25...	--	--	12	--	--	7	--	--	1	--	--

DATE	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	GROSS ALPHA, DISSOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DISSOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DISSOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)
DEC										
06...	.3	60	20	--	<6.3	1.2	1.7	1.5	1.5	1.4
JAN										
03...	--	--	--	--	--	--	--	--	--	--
MAR										
01...	.0	--	20	2300	--	--	--	--	--	--
MAY										
22...	1.0	120	30	230	<2.1	3.6	3.1	2.8	2.7	2.9
AUG										
28...	.2	--	0	570	--	--	--	--	--	--
SEP										
25...	--	30	--	--	<15	<.4	8.4	<.4	7.7	<.4

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY) (80155)
DEC				
06...	1410	113	233	71
JAN				
04...	1500	68	95	17
FEB				
07...	1445	75	94	19
MAR				
01...	0730	66	54	9.6
APR				
12...	1045	850	199	457
AUG				
27...	1330	16	3	.13
SEP				
25...	1345	15	6	.25

09175500 SAN MIGUEL RIVER AT NATURITA, CO--Continued

PHYTOPLANKTON DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	DEC 6,77		JAN 4,78		FEB 7,78		MAR 1,78	
TIME	1410		1500		1445		1100	
TOTAL CELLS/ML	370		910		1400		18000	
DIVERSITY: DIVISION	0.4		0.0		0.4		1.0	
.CLASS	0.4		0.0		0.4		1.0	
..ORDER	0.6		0.1		0.4		1.2	
...FAMILY	3.0		2.8		2.8		2.7	
....GENUS	3.1		2.8		2.9		2.8	
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)								
.CHLOROPHYCEAE								
..ULOTRICHALES								
...MICROSPORACEAE								
....MICROSPORA	14	4	--	-	--	-	--	-
...ULOTRICHACEAE								
....ULOTHRIX	--	-	--	-	--	-	7800#	44
..VOLVOCALES								
...CHLAMYDOMONADACEAE								
....CHLAMYDOMONAS	--	-	--	-	--	-	890	5
..ZYGNEMATALES								
...DESMIDIACEAE								
....COSMARIUM	--	-	*	0	--	-	--	-
CHRYSOPHYTA								
.BACILLARIOPHYCEAE								
..CENTRALES								
...COSCINODISCACEAE								
....CYCLOTELLA	--	-	9	1	--	-	--	-
....MELOSIRA	14	4	--	-	--	-	--	-
..PENNALES								
...ACHNANTHACEAE								
....ACHNANTHES	--	-	--	-	59	5	490	3
....COCCONEIS	7	2	63	7	23	2	--	-
...CYMBELLACEAE								
....CYMBELLA	29	8	63	7	82	6	1900	11
....RHOPALODIA	7	2	--	-	--	-	--	-
...DIATOMACEAE								
....DIATOMA	22	6	36	4	12	1	1600	9
...FRAGILARIACEAE								
....FRAGILARIA	--	-	--	-	--	-	200	1
....HANNAEA	--	-	--	-	--	-	98	1
....SYNEDRA	57#	15	81	9	82	6	390	2
...GOMPHONEMATACEAE								
....GOMPHONEMA	14	4	210#	23	140	11	1100	6
...MERIDIONACEAE								
....MERIDION	--	-	--	-	--	-	--	-
...NAVICULACEAE								
....NAVICULA	43	12	98	11	250#	19	1200	7
...NITZSCHIACEAE								
....NITZSCHIA	65#	17	210#	23	390#	30	790	4
...SURIRELLACEAE								
....SURIRELLA	93#	25	150#	17	140	11	1200	7
CYANOPHYTA (BLUE-GREEN ALGAE)								
.CYANOPHYCEAE								
..CHAMAESIPHONALES								
...CHAMAESIPHONACEAE								
....ENTOPHYSALIS	7	2	--	-	--	-	--	-
..CHROOCOCCALES								
...CHROOCOCCACEAE								
....ANACYSTIS	--	-	--	-	--	-	--	-
..HORMOGONALES								
...OSCILLATORIACEAE								
....OSCILLATORIA	--	-	--	-	--	-	--	-
....PHORMIDIUM	--	-	--	-	120	9	--	-
..CHROOCOCCALES								
...CHROOCOCCACEAE								
....GOMPHOSPHAERIA	--	-	--	-	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)								
.EUGLENOPHYCEAE								
..EUGLENALES								
...EUGLENACEAE								
....TRACHELOMONAS	--	-	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

09175500 SAN MIGUEL RIVER AT NATURITA, CO--Continued

PHYTOPLANKTON DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	APR 12,78	MAY 2,78	MAY 22,78	JUN 26,78
TIME	1045	1110	1640	1500
TOTAL CELLS/ML	1500	400	220	280
DIVERSITY: DIVISION	1.2	0.6	0.0	0.0
.CLASS	1.2	0.6	0.0	0.0
..ORDER	1.6	1.2	0.3	0.0
...FAMILY	2.7	2.7	2.6	2.4
....GENUS	2.8	2.7	2.6	2.4

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)								
.CHLOROPHYCEAE								
..ULOTRICHALES								
...MICROSPORACEAE								
....MICROSPORA	--	-	--	-	--	-	--	-
...ULOTRICHACEAE								
....ULOTHRIX	--	-	--	-	--	-	--	-
..VOLVOCALES								
...CHLAMYDOMONADACEAE								
....CHLAMYDOMONAS	--	-	--	-	--	-	--	-
..ZYGNEMATALES								
...DESMIDIACEAE								
....COSMARIUM	--	-	--	-	--	-	--	-
CHRYSOPHYTA								
.BACILLARIOPHYCEAE								
..CENTRALES								
...COSCINODISCACEAE								
....CYCLOTELLA	19	1	--	-	14	6	--	-
....MELOSIRA	--	-	76#	19	--	-	--	-
..PENNALES								
...ACHNANTHACEAE								
....ACHNANTHES	--	-	--	-	--	-	69#	25
....COCCONEIS	--	-	--	-	--	-	--	-
...CYMBELLACEAE								
....CYMBELLA	150	10	38	10	--	-	23	8
....RHOPALODIA	57	4	--	-	--	-	--	-
...DIATOMACEAE								
....DIATOMA	--	-	--	-	14	6	93#	33
...FRAGILARIACEAE								
....FRAGILARIA	--	-	--	-	--	-	--	-
....HANNAEA	--	-	--	-	--	-	--	-
....SYNEDRA	--	-	--	-	14	6	23	8
...GOMPHONEMATACEAE								
....GOMPHONEMA	280#	19	38	10	41#	19	46#	17
...MERIDIONACEAE								
....MERIDION	--	-	--	-	27	13	--	-
...NAVICULACEAE								
....NAVICULA	150	10	38	10	68#	31	--	-
...NITZSCHIACEAE								
....NITZSCHIA	76	5	57	14	--	-	--	-
...SURIRELLACEAE								
....SURIRELLA	38	3	95#	24	41#	19	23	8
CYANOPHYTA (BLUE-GREEN ALGAE)								
.CYANOPHYCEAE								
..CHAMAESIPHONALES								
...CHAMAESIPHONACEAE								
....ENTOPHYSALIS	--	-	--	-	--	-	--	-
..CHROCCOCCALES								
...CHROCCOCCAEAE								
....ANACYSTIS	110	8	--	-	--	-	--	-
..HORMOGONALES								
...OSCILLATORIACEAE								
....OSCILLATORIA	490#	34	--	-	--	-	--	-
....PHORMIMIDIUM	--	-	--	-	--	-	--	-
..CHROCCOCCALES								
...CHROCCOCCAEAE								
....GOMPHOSPHAERIA	19	1	--	-	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)								
.EUGLENOPHYCEAE								
..EUGLENALES								
...EUGLENACEAE								
....TRACHELOMONAS	57	4	57	14	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

09175900 DRY CREEK NEAR NATURITA, CO

LOCATION.--Lat 38°05'32", long 108°37'17", in NE¼NW¼ sec.10, T.44 N., R.16 W., San Miguel County, Hydrologic Unit 14030003, on right bank 50 ft (15 m) upstream from ford, 0.3 mi (0.5 km) upstream from unnamed tributary, 1.2 mi (1.9 km) downstream from Dead Horse Creek, 5.0 mi (8.0 km) northwest of Basin, and 14 mi (23 km) south of Naturita.

DRAINAGE AREA.--78.6 mi² (203.6 km²).

PERIOD OF RECORD.--July 1966 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,270 ft (1,911 m), from topographic map.

REMARKS.--Records fair to poor. Diversions for irrigation above station. Water is imported above station from Naturita Creek. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--12 years, 2.59 ft³/s (0.073 m³/s), 1,880 acre-ft/yr (2.32 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,660 ft³/s (160 m³/s) Sept. 5, 1970, gage height, 8.31 ft (2.533 m), from rating curve extended above 140 ft³/s (4.0 m³/s), on basis of slope-area measurements at gage heights 4.57 and 8.31 ft (1.393 and 2.533 m); no flow many days each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 499 ft³/s (14.1 m³/s) Oct. 7, gage height, 4.59 ft (1.399 m), only peak above base of 300 ft³/s (8.5 m³/s), no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.16	.00	.00	.00	2.2	14	7.4	1.0	.00	.00	.00
2	.00	.07	.00	.00	.00	5.1	14	7.7	.94	.00	.00	.00
3	.00	.04	.00	.00	.00	5.8	11	3.4	.58	.00	.00	.00
4	.00	.02	.00	.00	.00	4.2	8.8	3.4	.31	.00	.00	.00
5	.00	.00	.00	.00	.00	2.3	6.6	4.0	.25	.00	.00	.00
6	20	41	.00	.00	.00	2.2	4.9	4.0	.19	.00	.00	.00
7	170	12	.00	.00	.00	2.9	4.0	6.3	.10	.00	.00	.00
8	2.4	.96	.00	.00	.00	2.6	3.0	6.9	.00	.00	.00	.00
9	.19	.25	.00	.00	.00	2.3	2.4	4.4	.00	.00	.00	.00
10	.07	.10	.00	.00	.00	2.0	1.6	4.2	.00	.00	.00	.00
11	.04	.00	.00	.00	.00	1.6	.88	5.1	.00	.00	.00	.00
12	.02	.00	.00	.00	.00	1.5	.40	5.7	.00	.00	.00	.00
13	.01	.00	.00	.00	.00	1.5	1.4	6.6	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	1.4	2.4	11	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	1.3	1.0	18	.00	.00	.00	.00
16	.00	.00	.00	.00	.10	1.1	2.1	23	.00	.00	.00	.00
17	.00	.00	.00	.00	.20	.94	.94	23	.00	.00	.00	.00
18	.00	.00	.00	.00	.30	.76	.31	14	.00	.00	.00	.00
19	.00	.00	.00	.00	.40	.76	.13	13	.00	.00	.00	.00
20	.00	.00	.00	.00	.50	.70	.08	13	.00	.00	.00	.00
21	.00	.00	.00	.00	.60	2.2	.21	14	.00	.00	.00	.00
22	.00	.00	.00	.00	.70	9.0	.64	14	.00	.00	.00	.00
23	.00	.00	.00	.00	.80	8.0	.58	15	.00	.00	.00	.00
24	.00	.00	.00	.00	.90	6.6	.85	15	.00	.00	.00	.00
25	.00	.00	.00	.00	1.0	5.3	2.0	13	.00	.00	.00	.00
26	.00	.00	.00	.00	1.1	4.4	2.3	12	.00	.00	.00	.00
27	.00	.00	.00	.00	1.2	3.7	9.0	8.5	.00	.00	.00	.00
28	.00	.00	.00	.00	1.3	3.4	6.6	6.6	.00	.00	.00	.00
29	.01	.00	.00	.00	---	2.9	5.6	4.2	.00	.00	.00	.00
30	9.7	.00	.00	.00	---	2.3	7.2	2.6	.00	.00	.00	.00
31	.46	---	.00	.00	---	1.9	---	1.4	---	.00	.00	---
TOTAL	202.90	54.60	.00	.00	9.10	92.86	114.92	290.4	3.37	.00	.00	.00
MEAN	6.55	1.82	.000	.000	.33	3.00	3.83	9.37	.11	.000	.000	.000
MAX	170	41	.00	.00	1.3	9.0	14	23	1.0	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.70	.08	1.4	.00	.00	.00	.00
AC-FT	402	108	.00	.00	18	184	228	576	6.7	.00	.00	.00

CAL YR 1977 TOTAL 1906.63 MEAN 5.22 MAX 627 MIN .00 AC-FT 3780
WTR YR 1978 TOTAL 768.15 MEAN 2.10 MAX 170 MIN .00 AC-FT 1520

NOTE.--NO GAGE-HEIGHT RECORD NOV. 10 TO FEB. 27.

09177000 SAN MIGUEL RIVER AT URAVAN, CO

LOCATION.--Lat 38°21'26", long 108°42'44", in SW¼NE¼ sec.2, T.47 N., R.17 W., Montrose County, Hydrologic Unit 14030003, on right bank 20 ft (6 m) downstream from bridge on State Highway 141, 400 ft (120 m) downstream from Tabeguache Creek, and 1.5 mi (2.4 km) southeast of Uravan.

DRAINAGE AREA.--1,499 mi^2 (3,882 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1954 to September 1962, October 1973 to current year.

REVISED RECORDS.--WRD Colo. 1974: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 5,000 ft (1,524 m), from topographic map. Prior to Sept. 3, 1959, at site 0.5 mi (0.8 km) downstream at different datum.

REMARKS.--Records good. Natural flow of stream affected by storage reservoirs, diversions for irrigation of about 28,000 acres (113 km^2) above station, and return flow from irrigated areas.

AVERAGE DISCHARGE.--13 years (water years 1955-62, 1974-78), 315 ft^3/s (8.921 m^3/s), 228,200 acre-ft/yr (281 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,690 ft^3/s (189 m^3/s) Apr. 19, 1958, gage height, 11.75 ft (3.581 m), site and datum then in use; minimum daily, 9.4 ft^3/s (0.27 m^3/s) Aug. 10, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 6, 1970, reached a stage of 12.6 ft (3.84 m), from floodmarks, discharge, 8,910 ft^3/s (252 m^3/s), by slope-area measurement at site 5.5 mi (8.8 km) downstream.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,690 ft^3/s (76.2 m^3/s) Apr. 27, gage height, 7.13 ft (2.173 m), only peak above base of 2,000 ft^3/s (57 m^3/s); minimum daily 24 ft^3/s (0.68 m^3/s) Sept. 6, 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	76	56	53	68	85	744	988	1290	725	159	26
2	31	68	54	36	54	88	765	910	1240	710	136	26
3	30	64	61	52	39	99	586	880	1210	700	110	26
4	63	63	58	71	58	106	530	862	1230	634	95	26
5	66	64	60	76	58	88	590	745	1170	590	85	25
6	92	126	55	84	76	77	522	740	1100	538	76	24
7	735	192	49	73	79	67	594	730	1080	506	70	24
8	150	90	59	70	80	36	1030	670	1080	498	61	26
9	101	74	58	71	63	34	988	800	1120	454	60	31
10	82	58	43	80	66	36	690	1280	1290	506	67	27
11	74	50	55	76	95	52	650	1260	1400	538	67	26
12	73	35	56	77	70	63	1050	1050	1360	530	63	26
13	70	29	63	76	61	94	1420	1050	1330	514	60	25
14	66	30	40	73	61	84	1170	1220	1330	443	59	26
15	64	31	63	92	59	80	1240	1520	1390	412	56	28
16	63	33	68	92	73	73	1440	1720	1440	436	54	29
17	61	32	48	92	64	73	1170	1710	1260	432	47	29
18	61	59	53	90	58	76	775	1310	1140	466	42	29
19	60	67	55	73	55	79	868	1170	1100	426	42	34
20	60	71	34	76	64	80	934	1210	1130	362	40	34
21	61	64	26	82	70	84	1190	1270	1100	348	38	37
22	61	73	42	66	66	108	934	1290	1080	317	36	44
23	61	76	88	66	64	126	790	1290	1040	277	36	36
24	60	73	90	59	66	126	964	1330	1080	250	32	32
25	60	66	77	53	66	118	1260	1270	1170	226	29	32
26	60	66	50	58	73	108	1260	1160	1110	205	34	32
27	60	64	44	67	74	118	1850	1210	880	188	54	28
28	60	64	68	63	73	161	1240	1130	840	178	43	28
29	73	61	87	52	---	202	1130	1050	916	166	27	28
30	90	59	84	63	---	262	1070	1070	765	161	26	28
31	88	---	85	67	---	356	---	1240	---	155	26	---
TOTAL	2768	1978	1829	2179	1853	3239	29444	35135	34671	12891	1830	872
MEAN	89.3	65.9	59.0	70.3	66.2	104	981	1133	1156	416	59.0	29.1
MAX	735	192	90	92	95	356	1850	1720	1440	725	159	44
MIN	30	29	26	36	39	34	522	670	765	155	26	24
AC-FT	5490	3920	3630	4320	3680	6420	58400	69690	68770	25570	3630	1730

CAL YR 1977 TOTAL 32143.4 MEAN 88.1 MAX 1140 MIN 9.4 AC-FT 63760
WTR YR 1978 TOTAL 128689.0 MEAN 353 MAX 1850 MIN 24 AC-FT 255300

09177000 SAN MIGUEL RIVER AT URAVAN, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--August 1969 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)
OCT												
19...	1015	E42	930	7.6	9.5	6	10.0	17	K1200	K210	500	370
NOV												
28...	1030	E46	1050	8.3	3.0	5	12.1	53	--	--	--	--
JAN												
03...	1215	33	1150	8.3	.0	10	12.7	18	--	--	--	--
04...	0840	71	900	8.3	-.5	--	--	--	--	--	440	300
30...	1315	E29	800	8.0	2.5	5	12.0	13	--	<1	420	290
FEB												
07...	1330	74	910	8.3	6.5	--	10.2	25	--	--	--	--
28...	1530	66	840	8.0	9.0	4	10.1	0	--	--	--	--
APR												
13...	1100	1330	270	7.3	8.0	260	9.4	74	--	>120	110	39
MAY												
02...	1455	904	360	7.5	12.0	40	9.5	26	280	120	--	--
22...	1530	1230	350	7.5	15.0	110	8.4	22	--	--	--	--
JUN												
26...	1250	1180	260	7.7	19.0	110	8.3	30	340	K19	110	57
JUL												
31...	1450	157	800	8.3	20.0	3	7.9	5	--	--	--	--
AUG												
28...	1545	41	1300	7.0	24.0	3	7.0	55	--	--	--	--
SEP												
25...	1530	33	1700	8.3	21.0	1	7.4	91	--	--	950	800

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
OCT												
19...	130	43	29	.6	2.5	160	0	130	420	6.3	5.8	740
NOV												
28...	--	--	--	--	--	--	--	--	--	--	--	805
JAN												
03...	--	--	--	--	--	--	--	--	--	--	--	875
04...	110	39	29	.6	2.1	160	0	130	360	8.8	7.2	--
30...	110	36	28	.6	2.0	160	0	130	310	8.8	7.8	602
FEB												
07...	--	--	--	--	--	--	--	--	--	--	--	673
28...	--	--	--	--	--	--	--	--	--	--	--	604
APR												
13...	32	7.6	7.8	.3	2.7	88	0	72	47	2.8	7.8	142
MAY												
02...	--	--	--	--	--	--	--	--	--	--	--	217
22...	--	--	--	--	--	--	--	--	--	--	--	223
JUN												
26...	35	6.1	4.0	.2	.8	68	--	56	61	2.2	6.1	160
JUL												
31...	--	--	--	--	--	--	--	--	--	--	--	521
AUG												
28...	--	--	--	--	--	--	--	--	--	--	--	955
SEP												
25...	230	90	53	.8	4.2	180	0	150	870	8.8	5.7	1430

E ESTIMATED.

K BASED ON NON-IDEAL COLONY COUNT.

09177000 SAN MIGUEL RIVER AT URAVAN, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	SOLIDS, SUSP. TOTAL, RESIDUE AT 110 DEG. C (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT											
19...	715	1.01	83.9	9	.03	.01	.11	.12	.15	.00	1.9
NOV											
28...	--	1.09	100	20	.06	.03	.09	.12	.18	.02	1.7
JAN											
03...	--	1.19	78.0	39	.38	.00	.00	.04	.42	.05	3.1
04...	637	.87	122	--	--	--	--	--	--	--	--
30...	581	.82	47.1	34	.17	.04	.00	.04	.21	.03	2.8
FEB											
07...	--	.92	134	--	--	--	--	--	--	--	2.9
28...	--	.82	108	8	.01	.02	1.4	1.4	1.4	.01	2.1
APR											
13...	151	.19	510	455	.15	.06	1.5	1.6	1.8	.52	27
MAY											
02...	--	.30	530	--	.08	.03	.59	.62	.70	.08	5.9
22...	--	.30	741	--	.07	.01	.54	.55	.62	.13	8.0
JUN											
26...	149	.22	510	246	.12	.05	.30	.35	.47	.34	4.4
JUL											
31...	--	.71	221	15	.01	.01	.28	.29	.30	.00	2.5
AUG											
28...	--	1.30	106	15	.08	.01	1.2	1.2	1.3	.02	4.9
SEP											
25...	1350	1.94	127	0	.00	.01	.38	.39	.39	.01	5.1

09177100 SAN MIGUEL RIVER BELOW URAVAN, CO

LOCATION.--Lat 38°23'08", long 108°45'28", in SW¼NW¼ sec.28, T.48 N., R.17 W., Montrose County, Hydrologic unit 14030003, at county bridge 75 ft (23 m) downstream from Atkinson Creek and 2.0 mi (3.2 km) northwest of Uravan.

DRAINAGE AREA.--1,549 mi² (4,012 km²).

PERIOD OF RECORD.--August 1969 to current year.

REMARKS.--Field data collected prior to 1974 water year are available in district office.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	COLIFORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)
OCT												
19...	1200	42	1370	7.9	13.0	60	10.0	36	K360	K250	620	520
NOV												
28...	1200	46	1410	7.7	5.5	4	11.7	11	--	--	--	--
JAN												
03...	1120	E30	1550	7.5	.0	65	12.1	29	--	--	--	--
30...	1400	26	2200	7.8	3.5	5	11.6	19	--	<1	670	530
FEB												
07...	1115	59	1400	8.0	5.5	--	11.1	190	--	--	--	--
28...	1445	49	1550	7.2	8.5	10	10.2	0	--	--	--	--
APR												
12...	1700	816	310	7.3	13.0	90	9.2	33	K350	>240	130	57
MAY												
02...	1330	840	400	7.5	10.0	45	9.5	27	186	44	--	--
22...	1500	1090	380	8.7	15.0	120	8.4	26	--	--	--	--
JUN												
26...	1340	1140	300	7.7	19.0	90	8.3	19	K420	50	120	70
JUL												
31...	1410	155	950	8.2	20.0	4	7.8	15	--	--	--	--
AUG												
28...	1510	30	2000	8.4	24.0	3	7.0	62	--	--	--	--
SEP												
25...	1615	27	2200	8.5	21.0	1	7.4	42	--	--	990	860

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)
OCT												
19...	140	65	79	1.4	6.5	120	0	98	530	89	5.7	1010
NOV												
28...	--	--	--	--	--	--	--	--	--	--	--	1070
JAN												
03...	--	--	--	--	--	--	--	--	--	--	--	1210
30...	120	91	210	3.5	15	180	0	150	770	130	7.7	1530
FEB												
07...	--	--	--	--	--	--	--	--	--	--	--	982
28...	--	--	--	--	--	--	--	--	--	--	--	1080
APR												
12...	36	9.9	11	.4	2.8	90	0	74	64	7.2	8.0	182
MAY												
02...	--	--	--	--	--	--	--	--	--	--	--	240
22...	--	--	--	--	--	--	--	--	--	--	--	227
JUN												
26...	38	6.7	10	.4	1.5	64	--	53	78	6.9	6.7	198
JUL												
31...	--	--	--	--	--	--	--	--	--	--	--	628
AUG												
28...	--	--	--	--	--	--	--	--	--	--	--	1370
SEP												
25...	230	100	140	1.9	9.0	150	1	120	930	110	2.5	1750

E ESTIMATED.

K BASED ON NON-IDEAL COLONY COUNT.

09177100 SAN MIGUEL RIVER BELOW URAVAN, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	SOLIDS, SUSP, TOTAL, RESIDUE AT 110 DEG. C (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT											
19...	974	1.37	115	196	3.4	--	--	6.5	9.9	.09	5.0
NOV											
28...	--	1.46	133	5	.77	4.9	2.2	7.1	7.9	.04	1.9
JAN											
03...	--	1.05	--	364	9.0	.07	1.3	1.4	10	.21	1.8
30...	1430	2.08	107	31	1.3	18	.00	18	19	.05	2.3
FEB											
07...	--	1.34	156	--	--	--	--	--	--	--	2.7
28...	--	1.47	143	16	.18	5.1	2.8	7.9	8.1	.06	2.7
APR											
12...	143	.25	401	96	.13	.37	.73	1.1	1.2	.20	12
MAY											
02...	--	.33	544	--	.15	.68	1.4	2.1	2.3	.07	5.5
22...	--	.31	668	--	.10	.45	.65	1.1	1.2	.16	8.2
JUN											
26...	179	.27	609	175	.17	.35	.30	.65	.82	.34	2.8
JUL											
31...	--	.85	263	4	.46	4.2	.00	3.3	3.8	.02	2.7
AUG											
28...	--	1.86	111	10	1.2	4.9	.20	5.1	6.3	.03	4.5
SEP											
25...	1600	2.38	128	0	2.4	3.8	.60	4.4	6.8	.01	5.0

09235300 VERMILLION CREEK NEAR HIAWATHA, CO

LOCATION.--Lat 41°00'54", long 108°38'39", in NE¼SE¼NE¼ sec.15, T.12 N., R.100 W., Sweetwater County, WY, Hydrologic Unit 14040109, on right bank 0.7 mi (1.1 km) upstream from county road, 0.9 mi (1.4 km) downstream from Alkali Creek, 1.8 mi (2.9 km) upstream from Horseshoe Wash, 1.9 mi (3.1 km) upstream from Colorado-Wyoming State line, 2.3 mi (3.7 km) northwest of Hiawatha, and 49 mi (79 km) southwest of Rock Springs, WY.

DRAINAGE AREA.--196 mi² (508 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1975 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,610 ft (2,015 m), from topographic map.

REMARKS.--Records poor. No diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,160 ft³/s (32.9 m³/s) Sept. 7, 1978, gage height, 7.71 ft (2.350 m), from rating curve extended above 16 ft³/s (0.45 m³/s) on basis of slope-area measurements at gage heights of 3.03 ft (0.924 m), 6.52 ft (1.987 m) and 7.71 ft (2.350 m); no flow for many days during 1977 and 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,160 ft³/s (32.9 m³/s) Sept. 7, gage height, 7.71 ft (2.350 m); no flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.30	.42	.74	.40	.62	1.0	1.9	1.9	5.5	.64	.08	.21
2	.30	.59	.85	.30	.64	.96	1.8	1.7	5.0	.42	.00	.18
3	.30	.69	1.1	.20	.66	.90	1.7	1.6	5.5	.26	.00	.00
4	.22	.79	1.1	.20	.69	.90	1.5	1.5	7.1	.13	.00	.00
5	.34	.74	1.0	.30	.72	.95	1.5	2.4	5.5	.13	.00	.00
6	.42	.74	.96	.50	.70	1.2	1.4	2.1	6.2	.15	.00	.00
7	.42	.79	.90	.80	.74	1.3	1.3	3.2	5.0	.20	.00	120
8	.42	.42	.90	.93	.76	1.7	1.3	2.8	5.0	.14	.00	45
9	.38	.30	.85	1.0	.78	2.1	1.3	2.1	4.8	.02	.00	.96
10	.34	.28	.74	1.1	.74	2.6	1.3	2.0	4.5	.00	.00	.64
11	.23	.26	.80	1.1	.78	2.5	1.3	2.4	6.6	.00	.00	.54
12	.26	.26	.85	1.0	.80	2.2	1.1	2.3	5.0	.00	.05	.54
13	.42	.29	.90	.95	.78	1.9	1.3	2.0	2.6	.00	1.5	.50
14	.50	.32	1.0	.90	.76	1.7	1.4	1.9	1.9	.00	7.4	.46
15	.50	.35	1.1	.86	.74	1.6	1.4	2.0	1.6	.00	2.1	.42
16	.46	.41	1.0	.83	.72	1.6	1.4	2.0	1.3	.00	1.6	.38
17	.42	.37	.95	.80	.70	1.9	1.3	3.0	1.4	.00	1.1	12
18	.46	.33	.85	.78	.69	6.0	1.2	4.5	1.4	.00	2.0	3.7
19	.46	.28	.74	.74	.64	40	1.6	3.5	1.2	.00	1.5	.30
20	.46	.24	.60	.74	.69	16	1.6	3.2	1.2	.00	1.4	.23
21	.50	.21	.20	.69	.79	23	1.5	3.5	1.1	.00	1.2	.23
22	.54	.21	.06	.69	.85	16	1.2	4.2	1.0	.00	.96	.23
23	.54	.27	.01	.64	.85	6.6	1.7	4.2	.85	.00	.90	.23
24	.59	.40	.00	.59	.96	4.2	1.6	5.5	.79	.00	.69	.23
25	.59	.60	.00	.59	1.0	3.2	1.6	5.5	.69	.00	.74	.23
26	.59	.89	.00	.59	1.0	3.2	1.5	5.5	.69	.00	.24	.23
27	.59	1.1	.00	.54	1.1	3.0	1.9	5.8	.69	.00	.18	.28
28	.59	1.2	.00	.56	1.1	3.0	2.8	5.5	.64	.00	.00	.30
29	.59	1.2	.05	.56	---	2.4	2.0	6.2	.74	.00	.49	.34
30	.59	.96	.10	.58	---	2.3	1.9	8.3	.85	.00	.46	.34
31	.46	---	.50	.60	---	1.8	---	6.6	---	.00	.46	---
TOTAL	13.78	15.91	18.85	21.06	22.02	157.71	46.3	108.9	86.34	2.09	25.05	188.62
MEAN	.44	.53	.61	.68	.79	5.09	1.54	3.51	2.88	.067	.81	6.29
MAX	.59	1.2	1.1	1.1	1.1	40	2.8	8.3	7.1	.64	7.4	120
MIN	.22	.21	.00	.20	.62	.90	1.1	1.5	.64	.00	.00	.00
AC-FT	27	32	37	42	44	313	92	216	171	4.1	50	374

CAL YR 1977 TOTAL 793.80 MEAN 2.17 MAX 192 MIN .00 AC-FT 1570
WTR YR 1978 TOTAL 706.63 MEAN 1.94 MAX 120 MIN .00 AC-FT 1400

09235300 VERMILLION CREEK NEAR HIAWATHA, CO--Continued

PERIOD OF RECORD.--Water years 1976 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT 16...	1000	.38	1850	7.9	2.0	1	10.6	2.5	750	440	160
NOV 27...	1145	1.1	1650	8.1	.5	120	11.6	3.2	630	240	130
DEC 18...	1200	.85	1950	8.1	.0	20	10.8	2.3	680	290	140
JAN 19...	1200	.74	2000	8.1	.0	3	10.6	6.4	670	250	130
FEB 16...	1200	.72	1550	8.3	.0	60	10.8	--	660	240	130
MAR 14...	1215	1.7	1500	8.3	.0	700	10.5	2.2	510	170	100
APR 29...	1115	1.8	1800	8.5	14.0	750	8.3	2.8	580	220	100
MAY 23...	1230	4.1	1300	8.3	16.0	1200	8.6	3.1	460	130	83
JUN 17...	1210	1.4	1500	8.4	21.0	340	7.2	3.7	510	150	86
AUG 01...	0930	.23	1750	8.4	18.5	60	7.6	4.8	480	160	84
SEP 28...	1100	.26	2400	8.1	11.0	1	10.0	1.9	910	670	230

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
OCT 16...	84	240	3.8	4.9	370	0	300	890	33	.4	8.7
NOV 27...	74	250	4.3	5.0	470	0	390	670	33	.4	10
DEC 18...	80	250	4.2	4.9	480	0	390	770	34	.4	11
JAN 19...	84	230	3.9	4.4	510	0	420	680	32	.4	12
FEB 16...	82	260	4.4	4.1	520	0	430	680	37	.3	12
MAR 14...	64	180	3.5	4.3	420	0	340	510	25	.4	8.9
APR 29...	81	200	3.6	4.7	430	5	360	630	29	.2	12
MAY 23...	62	150	3.0	5.1	410	0	340	400	15	.2	14
JUN 17...	71	190	3.7	5.7	430	1	350	520	26	.3	14
AUG 01...	66	240	4.8	6.1	390	0	320	590	37	.5	9.9
SEP 28...	82	250	3.6	5.8	290	0	240	1200	32	.4	9.2

09235300 VERMILLION CREEK NEAR HIAWATHA, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	BORON, DISSOLVED (UG/L AS B)	IRON, DISSOLVED (UG/L AS FE)
OCT											
16...	1600	2.18	1.64	.01	.00	.41	.41	.42	.00	180	70
NOV											
27...	1400	1.90	4.16	.45	.10	1.2	1.3	1.8	.13	170	50
DEC											
18...	1530	2.08	3.51	1.0	.15	.52	.67	1.7	.04	190	80
JAN											
19...	1420	1.93	2.84	.48	.06	.43	.49	.97	.03	160	80
FEB											
16...	1460	1.99	2.86	.50	.02	.53	.55	1.1	.08	160	80
MAR											
14...	1100	1.50	5.05	.29	.08	1.9	2.0	2.3	.02	140	40
APR											
29...	1280	1.74	6.22	.30	.10	2.3	2.4	2.7	.79	170	4200
MAY											
23...	932	1.27	10.3	.64	.03	4.9	4.9	5.5	1.6	180	140
JUN											
17...	1130	1.54	4.27	.05	.05	1.7	1.7	1.8	.03	200	120
AUG											
01...	1230	1.67	.76	.04	.01	1.4	1.4	1.4	.10	250	250
SEP											
28...	1950	2.65	1.37	.02	.01	.53	.54	.56	.07	190	200

DATE	TIME	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	BERYLLIUM, DISSOLVED (UG/L AS BE)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)
OCT										
16...	1000	100	--	1	--	--	<10	--	20	--
JAN										
19...	1200	100	10	1	1	0	4	4	10	10
APR										
29...	1115	20000	--	10	--	--	1	--	20	--
AUG										
01...	0930	950	--	3	--	--	10	--	10	--

DATE	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	LITHIUM TOTAL RECOVERABLE (UG/L AS LI)	LITHIUM DISSOLVED (UG/L AS LI)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)
OCT										
16...	<10	--	450	<100	--	60	--	200	--	.0
JAN										
19...	6	3	440	9	2	80	80	150	140	.0
APR										
29...	31	--	43000	23	--	100	--	1000	--	.0
AUG										
01...	20	--	2100	43	--	80	--	110	--	.0

09235300 VERMILLION CREEK NEAR HIAWATHA, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, TOTAL RECOV- ERABLE (UG/L AS MO)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT									
16...	--	4	--	<50	--	--	--	10	--
JAN									
19...	.0	5	4	7	3	0	.0	30	10
APR									
29...	--	10	--	18	--	--	--	100	--
AUG									
01...	--	7	--	18	--	--	--	40	--

DATE	TIME	GROSS ALPHA, DIS- SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS- SOLVED (PCI/L AS SR/ YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/ YT-90)	RADIUM 226, DIS- SOLVED, RADON METHOD (PCI/L)
NOV								
27...	1145	<17	13	13	11	11	11	.14

09235450 VERMILLION CREEK AT INK SPRINGS RANCH, CO

LOCATION.--Lat 40°45'43", long 108°43'33", in SE¼SE¼ sec.3, T.9 N., R.101 W., Moffat County, Hydrologic Unit 14040109, on right bank 0.3 mi (0.5 km) downstream from unnamed tributary, 0.5 mi (0.8 km) upstream from inflow of Ink Springs, 800 ft (244 m) southwest of Ink Springs Ranch headquarters, and about 37 mi (60 km) northwest of Maybell.

DRAINAGE AREA.--968 mi² (2,507 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1977 to September 1978.

GAGE.--Water-stage recorder. Altitude of gage is 5,725 ft (1,745 m), from topographic map.

REMARKS.--Records good except those for period of no gage-height record, which are poor. Diversions above station for irrigation of hay meadows below station.

COOPERATION.--Records collected and computed by Colorado Division of Water Resources and reviewed by Geological Survey.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 614 ft³/s (17.4 m³/s), Sept. 15, gage height, 4.18 ft (1.274 m) from rating curve extended above 16 ft³/s (0.45 m³/s) on basis of slope area measurement of peak flow; minimum daily, 1.1 ft³/s (0.031 m³/s) Aug. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	2.4	2.9	2.7	5.9	14	18	6.0	8.0	2.4	1.6	1.3
2	2.0	2.4	2.9	2.5	6.9	13	15	6.0	7.7	2.5	3.4	1.4
3	2.0	2.4	3.0	2.9	7.7	24	12	6.0	8.0	2.5	2.0	1.5
4	2.0	2.4	2.9	3.2	8.7	31	10	6.0	8.0	2.4	2.0	1.5
5	2.0	2.4	2.9	3.3	8.1	17	8.7	5.0	7.5	2.5	2.0	1.5
6	2.0	2.6	2.9	3.4	9.2	26	8.5	5.0	7.0	2.5	2.0	1.5
7	2.0	2.8	2.9	3.5	9.6	32	8.4	6.0	6.5	2.5	2.0	1.5
8	2.0	2.8	3.0	3.4	12	25	8.0	6.0	6.0	2.5	1.7	5.0
9	2.0	2.6	2.9	3.6	9.0	25	7.4	7.0	5.5	2.5	1.7	3.0
10	2.0	2.3	3.1	3.9	9.5	19	6.3	10	5.0	2.5	1.8	2.0
11	2.0	2.2	3.1	4.0	14	14	6.6	16	4.5	2.3	1.8	2.0
12	2.0	2.2	3.2	4.0	10	14	6.0	12	4.0	2.3	1.6	2.0
13	2.0	2.3	3.1	4.2	8.1	13	4.8	11	3.5	2.4	1.8	2.0
14	2.0	2.4	3.2	4.2	8.8	13	4.5	11	3.0	2.5	1.8	2.0
15	2.0	2.4	3.3	4.4	8.2	9.5	5.0	11	3.0	2.5	2.8	100
16	2.0	2.4	3.2	4.4	7.6	8.7	7.4	10	2.5	2.5	2.6	20
17	2.0	2.6	3.1	4.5	7.3	11	7.0	10	2.5	2.3	2.0	10
18	2.1	2.6	3.2	4.6	7.8	18	5.4	10	2.2	2.3	1.8	40
19	2.1	2.3	3.1	4.5	7.6	30	5.6	10	2.2	2.0	1.5	13
20	2.1	3.0	3.1	4.5	6.1	30	5.6	10	2.2	2.0	2.0	10
21	2.1	2.2	2.9	4.7	7.2	27	6.0	10	2.0	2.1	2.4	6.3
22	2.1	2.4	3.1	4.8	7.8	29	5.0	9.0	2.0	2.2	2.0	4.0
23	2.2	2.8	3.1	5.0	7.5	38	5.0	9.0	2.0	1.9	1.8	3.2
24	2.2	2.8	3.1	4.7	9.9	18	6.0	9.0	2.1	1.8	1.8	2.4
25	2.2	2.8	3.3	6.9	15	13	7.0	9.0	2.2	2.0	2.0	2.3
26	2.2	2.8	3.2	6.7	17	11	7.0	9.0	2.3	1.8	1.9	2.3
27	2.3	2.8	3.1	6.5	18	12	7.0	8.0	2.4	1.7	1.5	2.3
28	2.3	2.8	3.2	5.6	13	11	7.0	8.0	2.5	1.6	1.5	2.3
29	2.3	2.8	3.2	5.5	---	10	7.0	8.0	2.4	1.5	1.1	2.3
30	2.3	2.8	3.2	5.8	---	9.4	6.0	8.0	2.3	1.5	1.2	2.3
31	2.4	---	3.1	5.6	---	9.2	---	8.0	---	1.4	1.2	---
TOTAL	64.9	76.5	95.5	137.5	267.5	574.8	223.2	269.0	121.0	67.4	58.5	250.9
MEAN	2.09	2.55	3.08	4.44	9.55	18.5	7.44	8.68	4.03	2.17	1.89	8.36
MAX	2.4	3.0	3.3	6.9	18	38	18	16	8.0	2.5	3.4	100
MIN	2.0	2.2	2.9	2.5	5.9	8.7	4.5	5.0	2.0	1.4	1.1	1.3
AC-FT	129	152	189	273	531	1140	443	534	242	134	116	498

WTR YR 1978 TOTAL 2207.5 MEAN 6.05 MAX 100 MIN 1.1 AC-FT 4380

NOTE.--NO GAGE-HEIGHT RECORD OCT. 1 TO NOV. 3, NOV. 24 TO JAN. 19, APR. 21 TO MAY 30.

09235450 VERMILLION CREEK AT INK SPRINGS RANCH, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1977 to September 1978.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (NTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, (COLS. PER 100 ML)
NOV 21...	1145	2.2	950	7.8	5.0	--	9.9	15	--	--
DEC 22...	1300	3.1	1400	7.9	9.0	15	8.5	41	--	--
JAN 24...	1300	4.7	1530	8.4	--	--	9.4	28	--	--
MAR 20...	1200	29	1900	8.1	9.5	--	--	110	--	--
APR 20...	1130	5.4	1850	8.3	13.0	--	7.6	40	62	820
MAY 31...	1430	8.2	1700	8.3	20.5	1300	7.4	93	K1700	--
JUN 22...	1500	2.0	800	8.1	30.0	--	--	13	4100	K2500
JUL 25...	1250	2.4	980	8.2	28.0	--	7.4	10	K270	640
SEP 28...	1215	2.2	1000	8.0	20.5	.70	7.5	22	--	85

DATE	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)
NOV 21...	300	100	73	29	97	2.4	6.8	240	0	200
DEC 22...	510	290	120	50	140	2.7	8.3	260	0	210
JAN 24...	480	260	120	43	120	2.4	5.7	270	0	220
MAR 20...	760	610	210	58	180	2.8	5.9	190	0	160
APR 20...	680	460	150	75	190	3.2	7.5	270	0	220
MAY 31...	550	300	120	61	180	3.3	6.6	310	0	250
JUN 22...	290	110	68	28	85	2.4	8.0	210	0	170
JUL 25...	290	99	69	28	100	2.6	7.6	230	0	190
SEP 28...	300	110	74	28	93	2.3	7.1	230	0	190

K BASED ON NON-IDEAL COLONY COUNT.

09235450 VERMILLION CREEK AT INK SPRINGS RANCH, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)
NOV 21...	110	140	.3	13	583	588	.79	3.46	.23	.03
DEC 22...	370	140	.4	14	1010	971	1.37	8.45	.31	.00
JAN 24...	410	78	.4	16	943	926	1.28	12.0	.18	.06
MAR 20...	880	34	.6	8.0	1480	1470	2.01	116	1.5	.29
APR 20...	650	110	.4	12	1420	1330	1.93	20.7	.21	.03
MAY 31...	570	70	.4	12	1190	1170	1.62	26.4	.35	.09
JUN 22...	110	140	.3	13	548	566	.75	2.96	.05	.00
JUL 25...	140	140	.4	12	555	611	.75	3.60	.05	.00
SEP 28...	120	150	.3	13	581	599	.79	3.53	.08	.01

DATE	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	PHYTO-PLANK-TON, TOTAL (CELLS PER ML)
NOV 21...	.21	.24	.47	.06	.00	160	30	--	--	97
DEC 22...	.33	.33	.64	.02	.02	170	10	3.8	.6	--
JAN 24...	.22	.28	.46	.08	.03	130	80	--	--	--
MAR 20...	2.9	3.2	4.7	2.4	.14	130	70	9.8	--	0
APR 20...	1.1	1.1	1.3	.40	.01	190	30	5.1	--	410
MAY 31...	2.6	2.7	3.1	1.3	.02	200	10	6.3	>5.0	410
JUN 22...	.29	.29	.34	.01	.01	170	20	2.1	.3	0
JUL 25...	.28	.28	.33	.01	.00	160	60	1.7	--	--
SEP 28...	.27	.28	.36	.00	.00	180	10	2.3	.2	--

09235450 VERMILLION CREEK AT INK SPRINGS RANCH, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SOLIDS, RESIDUE AT 105 DEG. C, DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	BARIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS BA)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)
DEC											
22...	1300	930	13	0	1	2	--	100	100	--	0
MAR											
20...	1200	--	--	40	--	2	--	--	200	--	--
MAY											
31...	1430	1320	1860	--	10	--	14	400	--	110	0
SEP											
28...	1215	--	--	0	2	1	15	0	0	0	0

DATE	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	BERYL-LIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COBALT, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CO)
DEC											
22...	0	--	1	1	--	0	10	--	0	0	--
MAR											
20...	0	--	--	1	--	--	10	--	--	0	--
MAY											
31...	--	0	2	--	0	30	--	4	14	--	18
SEP											
28...	0	0	2	0	3	0	0	2	3	3	10

DATE	COPPER, DIS-SOLVED (UG/L AS CU)	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB)	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MANGA-NESE, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)
DEC											
22...	5	--	8	3	--	130	120	40	40	--	.0
MAR											
20...	9	--	--	5	--	--	60	--	20	--	--
MAY											
31...	--	120	38	--	20	140	--	1500	--	760	.1
SEP											
28...	1	4	12	4	20	130	130	60	60	760	.0

DATE	MERCURY DIS-SOLVED (UG/L AS HG)	MERCURY RECOV. FM BOT-TOM MA-TERIAL (UG/L AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	MOLYB-DENUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	NICKEL, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SELE-NIUM, TOTAL IN BOT-TOM MA-TERIAL (UG/G)
DEC											
22...	.0	--	4	3	--	4	1	--	2	2	--
MAR											
20...	.0	--	--	6	--	--	0	--	--	4	--
MAY											
31...	--	.0	6	--	4	20	--	16	3	--	0
SEP											
28...	.0	.0	10	6	3	7	0	25	1	1	0

09235450 VERMILLION CREEK AT INK SPRINGS RANCH, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	GROSS ALPHA, DISSOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DISSOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DISSOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)
DEC 22...	1.0	20	10	--	28	.6	8.7	1.0	7.7	1.0
MAR 20...	3.0	--	20	--	--	--	--	--	--	--
MAY 31...	--	180	--	16	<17	120	12	80	11	71
SEP 28...	.0	10	0	9	<7.9	<.4	7.6	<.4	7.1	<.4

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SED. SUSP. FALL DIAM. % FINER THAN .062 MM (70342)	SED. SUSP. FALL DIAM. % FINER THAN .125 MM (70343)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM (80164)	BED MAT. SIEVE DIAM. % FINER THAN .125 MM (80165)
NOV 21...	1145	2.2	78	.46	--	--	--	--	--
DEC 22...	1300	3.1	60	.50	--	--	--	0	1
JAN 24...	1230	4.7	188	2.4	--	--	--	--	--
MAR 20...	1120	29	90500	7090	--	99	100	--	--
APR 20...	1150	5.4	632	9.2	--	--	--	--	--
MAY 31...	1320	8.2	1970	44	97	--	--	--	--
JUL 25...	1240	2.4	27	.17	--	--	--	2	8
SEP 28...	1225	2.2	12	.07	--	--	--	--	--

DATE	BED MAT. SIEVE DIAM. % FINER THAN .250 MM (80166)	BED MAT. SIEVE DIAM. % FINER THAN .500 MM (80167)	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM (80168)	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM (80169)	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM (80170)	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM (80171)	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM (80172)	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM (80173)
NOV 21...	--	--	--	--	--	--	--	--
DEC 22...	3	33	73	92	96	98	99	100
JAN 24...	--	--	--	--	--	--	--	--
MAR 20...	--	--	--	--	--	--	--	--
APR 20...	--	--	--	--	--	--	--	--
MAY 31...	--	--	--	--	--	--	--	--
JUL 25...	41	85	98	100	--	--	--	--
SEP 28...	--	--	--	--	--	--	--	--

09235450 VERMILLION CREEK AT INK SPRINGS RANCH, CO--Continued

PHYTOPLANKTON DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	NOV 21,77		MAR 28,78		APR 20,78		MAY 31,78		JUN 22,78	
TIME	1145		1200		1100		1430		1500	
TOTAL CELLS/ML	97		0		410		410		0	
DIVERSITY: DIVISION	0.0		0.0		1.5		0.9		0.0	
.CLASS	0.0		0.0		1.5		0.9		0.0	
..ORDER	0.0		0.0		1.6		0.9		0.0	
...FAMILY	2.0		0.0		2.2		1.2		0.0	
....GENUS	2.0		0.0		2.2		1.2		0.0	
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)										
.CHLOROPHYCEAE										
..CHLOROCOCCALES										
...OOCYSTACEAE										
....ANKISTRODESMUS	--	-	--	-	14	3	--	-	--	-
..VOLVOCALES										
...CHLAMYDOMONADACEAE										
....CHLAMYDOMONAS	--	-	--	-	29	7	--	-	--	-
CHRYSOPHYTA										
.BACILLARIOPHYCEAE										
..PENNALES										
...DIATOMACEAE										
....DIATOMA	--	-	--	-	*	0	--	-	--	-
...FRAGILARIACEAE										
....FRAGILARIA	--	-	--	-	*	0	--	-	--	-
....SYNEDRA	26#	27	--	-	--	-	--	-	--	-
...GOMPHONEMATACEAE										
....GOMPHONEMA	26#	27	--	-	--	-	--	-	--	-
...NAVICULACEAE										
....NAVICULA	19#	20	--	-	29	7	--	-	--	-
....PINNULARIA	--	-	--	-	--	-	45	11	--	-
...NITZSCHIACEAE										
....NITZSCHIA	--	-	--	-	43	10	--	-	--	-
...SURIRELLACEAE										
....CYMATOPLEURA	--	-	--	-	*	0	--	-	--	-
....SURIRELLA	26#	27	--	-	86#	21	90#	22	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)										
.CYANOPHYCEAE										
..HORMOGONALES										
...NOSTOCACEAE										
....ANABAENA	--	-	--	-	200#	48	--	-	--	-
...OSCILLATORIACEAE										
....OSCILLATORIA	--	-	--	-	--	-	270#	67	--	-
EUGLENOPHYTA (EUGLENOIDS)										
.EUGLENOPHYCEAE										
..EUGLENALES										
...EUGLENACEAE										
....TRACHELOMONAS	--	-	--	-	14	3	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

09236000 BEAR RIVER NEAR TOPONAS, CO

LOCATION.--Lat 40°03'00", long 107°04'00", in NW¼ sec.20, T.1 N., R.86 W., Garfield County, Hydrologic Unit 14050001, on right bank just downstream from Yampa Reservoir Dam at Stillwater campground, 0.8 mi (1.3 km) downstream from Randall Creek, 0.8 mi (1.3 km) upstream from Dome Creek, and 14 mi (23 km) west of Toponas.

DRAINAGE AREA.--23 mi² (60 km²), approximately.

PERIOD OF RECORD.--October 1952 to September 1965, October 1966 to current year. Published as Yampa River near Toponas prior to October 1973.

GAGE.--Water-stage recorder and Parshall flume. Altitude of gage is 9,760 ft (2,957 m), from river-profile map. Oct. 28, 1952, to Sept. 30, 1965, water-stage recorder at site 50 ft (15 m) upstream at different datum.

REMARKS.--Records good. Flow regulated by Stillwater Reservoir, capacity, 6,200 acre-ft (7.64 hm³) 3.5 mi (5.6 km) upstream and Yampa Reservoir, capacity, 620 acre-ft (764,000 m³). Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--25 years, 39.7 ft³/s (1.124 m³/s), 28,760 acre-ft/yr (35.5 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 436 ft³/s (12.3 m³/s) July 2, 1957, gage height, 6.39 ft (1.948 m), site and datum then in use; minimum daily, 1.6 ft³/s (0.045 m³/s) Oct. 6-24, Nov. 18 to Dec. 8, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 430 ft³/s (12.2 m³/s) at 0300 June 26, gage height, 4.01 ft (1.222 m); minimum daily, 6.8 ft³/s (0.19 m³/s) Nov. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	10	12	11	13	11	13	16	79	185	74	39
2	14	10	13	11	13	12	13	17	84	182	71	38
3	14	8.3	13	11	13	12	12	19	85	179	60	38
4	14	8.3	13	11	13	11	11	18	89	174	58	38
5	14	8.3	13	11	13	11	11	17	83	169	57	37
6	14	8.3	12	11	13	11	11	17	86	159	55	37
7	14	8.3	12	12	13	11	11	16	97	142	54	37
8	14	8.3	11	11	13	11	11	16	98	137	53	37
9	14	8.1	11	11	12	11	13	15	112	137	53	36
10	14	8.0	10	11	12	11	13	16	130	137	53	35
11	14	7.8	10	11	12	11	12	18	138	135	52	36
12	14	7.6	10	12	12	11	13	19	133	128	52	36
13	12	7.5	10	11	12	11	13	20	136	124	52	35
14	10	7.3	10	11	12	11	13	28	143	121	53	34
15	10	7.1	10	11	12	11	13	40	148	120	52	33
16	10	7.0	11	12	12	11	13	52	151	119	49	32
17	10	6.9	12	12	12	11	13	54	145	127	47	34
18	10	6.8	12	12	12	11	12	41	137	122	46	34
19	10	9.1	12	12	12	11	12	38	139	115	46	33
20	10	11	12	12	12	10	12	49	139	114	45	33
21	10	12	12	12	12	10	12	55	144	115	44	33
22	10	13	11	12	12	10	12	60	151	120	44	32
23	10	14	11	12	11	10	12	72	163	128	44	31
24	10	13	11	12	11	10	12	77	185	123	43	31
25	10	13	12	12	11	10	13	76	265	113	42	31
26	10	13	12	12	11	10	15	75	390	119	42	30
27	10	13	11	13	11	10	19	79	310	117	42	30
28	10	13	11	14	11	10	18	72	265	114	41	30
29	10	13	11	13	---	10	17	75	252	119	40	30
30	10	13	11	13	---	11	16	86	233	112	40	30
31	10	---	12	13	---	12	---	83	---	76	39	---
TOTAL	360	294.0	354	365	338	334	391	1336	4710	4082	1543	1020
MEAN	11.6	9.80	11.4	11.8	12.1	10.8	13.0	43.1	157	132	49.8	34.0
MAX	14	14	13	14	13	12	19	86	390	185	74	39
MIN	10	6.8	10	11	11	10	11	15	79	76	39	30
AC-FT	714	583	702	724	670	662	776	2650	9340	8100	3060	2020

CAL YR 1977 TOTAL 7226.5 MEAN 19.8 MAX 97 MIN 6.8 AC-FT 14330
WTR YR 1978 TOTAL 15127.0 MEAN 41.4 MAX 390 MIN 6.8 AC-FT 30000

09239500 YAMPA RIVER AT STEAMBOAT SPRINGS, CO

LOCATION.--Lat 40°29'01", long 106°49'54", in NW¼NE¼ sec.17, T.6 N., R.84 W., Routt County, Hydrologic Unit 14050001, on right bank 30 ft (9 m) downstream from Fifth Street Bridge in Steamboat Springs and 0.6 mi (1.0 km) upstream from Soda Creek.

DRAINAGE AREA.--604 mi² (1,564 km²).

PERIOD OF RECORD.--May 1904 to October 1906, October 1909 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 764: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 6,695.47 ft (2,040.779 m), National Geodetic Vertical Datum of 1929. Prior to May 8, 1905, nonrecording gage at bridge 0.2 mi (0.3 km) upstream at datum 4.16 ft (1.268 m) higher. May 8, 1905, to Oct. 31, 1906, nonrecording gage on bridge 30 ft (9 m) upstream at datum 0.44 ft (0.134 m) higher. Mar. 8, 1910, to Sept. 11, 1934, water-stage recorder at present site at datum 0.44 ft (0.134 m) higher.

REMARKS.--Records good except those for winter period, which are fair. Natural flow of stream affected by two diversions for irrigation to Egeria Creek in Colorado River basin, one diversion for irrigation from Trout Creek drainage to Oak Creek drainage, irrigation of about 19,700 acres (79.7 km²) above station, and storage reservoirs. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--71 years, 466 ft³/s (13.20 m³/s), 337,600 acre-ft/yr (416 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,820 ft³/s (193 m³/s) June 14, 1921, gage height, 7.08 ft (2.158 m), present datum, from rating curve extended above 4,800 ft³/s (140 m³/s); minimum daily, 4.0 ft³/s (0.11 m³/s) Sept. 8, 1934, Sept. 10-13, 1944.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,360 ft³/s (123 m³/s) at 0100 June 16, gage height, 6.16 ft (1.878 m), only peak above base of 3,000 ft³/s (85 m³/s); minimum daily, 46 ft³/s (1.30 m³/s) Nov. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	70	72	81	74	85	466	928	2410	2210	292	109
2	53	69	59	90	73	85	504	889	2550	1960	258	105
3	53	69	72	72	78	82	499	981	2560	1780	229	68
4	54	70	95	69	79	87	487	1030	2500	1580	210	85
5	55	71	92	75	82	88	506	926	2540	1400	201	91
6	68	72	78	79	85	87	491	834	2330	1260	195	88
7	140	76	80	77	87	92	516	775	2530	1180	189	82
8	119	94	87	78	94	102	647	769	2620	1110	181	88
9	108	57	78	78	94	102	741	750	3000	1010	179	88
10	100	49	71	74	92	98	649	824	3550	948	176	87
11	92	62	78	77	87	105	668	823	4180	948	169	91
12	88	67	76	77	87	112	780	820	4060	1150	168	103
13	87	69	80	75	87	107	773	832	3850	954	208	102
14	86	66	86	75	82	103	838	1020	4010	806	316	96
15	86	68	87	74	79	102	862	1470	3890	720	413	91
16	83	68	87	70	80	98	950	1960	4090	781	337	88
17	84	67	79	77	81	100	911	2300	3820	1020	224	97
18	83	71	73	75	78	110	685	2080	3500	850	187	113
19	79	69	80	73	73	120	718	1630	3250	711	192	113
20	74	56	78	76	70	137	775	1500	3070	634	179	123
21	72	46	83	71	73	145	765	1650	2950	561	171	119
22	72	58	67	74	78	143	665	1940	3000	508	166	130
23	72	74	70	73	81	152	630	2230	3070	432	160	138
24	71	68	81	68	81	153	621	2520	3000	366	150	125
25	68	73	85	70	84	150	595	2700	2950	334	141	114
26	67	83	87	67	85	154	671	2420	2660	317	136	107
27	65	83	83	67	86	164	888	2530	2580	297	127	100
28	63	81	82	69	84	185	993	2280	2430	276	116	93
29	62	78	82	71	---	224	876	2270	2280	279	111	90
30	67	75	83	69	---	298	946	2520	2520	290	108	85
31	68	---	81	71	---	363	---	2670	---	287	107	---
TOTAL	2392	2079	2472	2292	2294	4133	21116	48871	91750	26959	5996	3009
MEAN	77.2	69.3	79.7	73.9	81.9	133	704	1576	3058	870	193	100
MAX	140	94	95	90	94	363	993	2700	4180	2210	413	138
MIN	53	46	59	67	70	82	466	750	2280	276	107	68
AC-FT	4740	4120	4900	4550	4550	8200	41880	96940	182000	53470	11890	5970

CAL YR 1977 TOTAL 61693 MEAN 169 MAX 974 MIN 28 AC-FT 122400
WTR YR 1978 TOTAL 213363 MEAN 585 MAX 4180 MIN 46 AC-FT 423200

09241000 ELK RIVER AT CLARK, CO

LOCATION.--Lat 40°43'03", long 106°54'55", in NW¼NW¼ sec.27, T.9 N., R.85 W., Routt County, Hydrologic Unit 14050001, on left bank 30 ft (9 m) downstream from bridge on State Highway 129, 0.8 mi (1.3 km) north of Clark, and 2.0 mi (3.2 km) upstream from Cottonwood Gulch.

DRAINAGE AREA.--206 mi² (534 km²).

PERIOD OF RECORD.--May 1910 to September 1922 (published as "near Clark"), April 1930 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1733: 1956.

GAGE.--Water-stage recorder. Datum of gage is 7,267.75 ft (2,215.210 m) (State Highway Department bench mark). May 1910 to September 1922, nonrecording gage at site 30 ft (9 m) upstream at datum 0.15 ft (0.046 m) lower. Apr. 23, 1930, to Sept. 27, 1934, water-stage recorder at present site at datum 0.15 ft (0.046 m) lower.

REMARKS.--Records good except those for winter period, which are fair. Diversions above station for irrigation of about 230 acres (931,000 m²) above and about 460 acres (1.86 km²) below station. Natural flow of stream affected by storage in Lester Creek Reservoir (known also as Pearl Lake), capacity, 5,660 acre-ft (6.98 hm³) since 1963 and Steamboat Lake, capacity, 23,060 acre-ft (28.4 hm³) since 1968. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--60 years, 335 ft³/s (9.487 m³/s), 242,700 acre-ft/yr (299 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 4,470 ft³/s (127 m³/s) June 6, 9, 1912; minimum daily determined, 22 ft³/s (0.62 m³/s) Dec. 12, 1963, but a lesser discharge may have occurred during periods of no gage-height record prior to 1939.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,480 ft³/s (98.6 m³/s) at 2300 June 15, gage height, 5.43 ft (1.655 m), only peak above base of 1,900 ft³/s (54 m³/s); minimum daily, 32 ft³/s (0.91 m³/s) Dec. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	48	57	35	40	47	50	130	603	1670	1950	296	68
2	49	57	37	40	47	50	133	802	1720	1870	289	84
3	49	59	40	40	47	50	125	896	1860	1800	253	82
4	50	60	43	40	47	50	124	832	2030	1680	232	82
5	49	62	44	40	47	50	135	731	1870	1550	214	80
6	51	62	44	40	47	50	135	664	1850	1420	203	77
7	75	60	44	40	47	50	155	621	2050	1310	200	76
8	89	57	44	40	46	50	188	521	2190	1300	193	81
9	72	41	44	40	46	50	228	423	2490	1260	165	78
10	63	52	44	40	46	50	185	481	3030	1190	174	73
11	54	51	44	40	46	50	151	539	3260	1180	188	85
12	51	54	44	40	46	52	168	602	2900	1340	168	100
13	57	51	44	40	46	52	172	750	2630	1160	183	92
14	56	52	44	40	46	53	173	1040	2840	1040	194	85
15	55	55	44	40	46	54	189	1460	2900	959	217	81
16	55	52	42	40	45	55	205	1710	3090	907	192	75
17	54	47	40	40	44	56	221	1570	2800	887	158	72
18	52	49	38	40	44	57	204	1150	2450	829	148	83
19	52	40	37	40	44	60	190	987	2430	764	156	92
20	53	38	34	40	44	62	199	1060	2290	731	138	96
21	53	42	32	40	45	64	225	1200	2310	686	131	89
22	59	44	33	40	45	65	223	1410	2420	595	129	96
23	58	44	35	41	45	66	207	1680	2380	523	126	108
24	56	44	38	41	45	68	196	1890	2520	472	119	107
25	56	45	39	41	46	68	216	1860	2640	439	114	100
26	55	45	39	42	46	69	327	1760	2210	415	109	88
27	53	45	39	42	47	70	480	1760	1950	385	103	80
28	53	42	39	43	48	70	447	1620	1940	364	98	74
29	53	40	39	43	---	76	450	1730	1890	367	96	71
30	59	37	39	44	---	89	491	1880	1890	385	93	69
31	62	---	39	44	---	106	---	1660	---	332	89	---
TOTAL	1751	1484	1241	1261	1285	1862	6672	35892	70500	30090	5168	2544
MEAN	56.5	49.5	40.0	40.7	45.9	60.1	222	1158	2350	971	167	84.8
MAX	89	62	44	44	48	106	491	1890	3260	1950	296	108
MIN	48	37	32	40	44	50	124	423	1670	332	89	69
AC-FT	3470	2940	2460	2500	2550	3690	13230	71190	139800	59680	10250	5050

CAL YR 1977 TOTAL 44548 MEAN 122 MAX 933 MIN 30 AC-FT 88360
WTR YR 1978 TOTAL 159750 MEAN 438 MAX 3260 MIN 32 AC-FT 316900

09243700 MIDDLE CREEK NEAR OAK CREEK, CO

LOCATION.--Lat 40°23'08", long 106°59'33", in SW¼SW¼ sec.13, T.5 N., R.86 W., Routt County, Hydrologic Unit 14050001, on left bank 1.1 mi (1.77 km) above mouth of Foidel Creek and 13.5 mi (21.7 km) northwest of Oak Creek.

DRAINAGE AREA.--23.5 mi^2 (60.9 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1975 to current year.

GAGE.--Water-stage recorder. Datum of gage is 6,720 ft (2,050 m), National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter period, which are fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 33 ft^3/s (0.93 m^3/s) May 18, 1978, gage height, 2.18 ft (0.664 m); no flow many days each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 15 ft^3/s (0.42 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Apr. 8	2030	22	0.62	1.97	0.600	May 18	0300	*33	0.93	2.18	0.664
Apr. 17	0330	24	.68	2.06	.628						

No flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	10	23	7.8	2.4	.20	1.4
2	.00	.00	.00	.00	.00	.00	11	22	7.9	2.0	.01	1.3
3	.00	.00	.00	.00	.00	.00	12	22	6.6	1.4	.00	2.3
4	.00	.00	.00	.00	.00	.00	13	25	8.0	.74	.00	2.8
5	.00	.00	.00	.00	.00	.00	15	25	8.9	.72	.00	3.1
6	.00	.00	.00	.00	.00	.00	17	24	7.9	.72	.00	3.1
7	.00	.00	.00	.00	.00	.00	19	22	6.4	.69	.00	2.5
8	.00	.00	.00	.00	.00	.00	17	22	6.4	.62	.00	1.9
9	.00	.00	.00	.00	.00	.00	16	20	4.0	.48	.22	1.6
10	.00	.00	.00	.00	.00	.00	12	20	3.4	.55	1.3	1.4
11	.00	.00	.00	.00	.00	.00	12	20	2.8	1.3	1.6	1.3
12	.00	.00	.00	.00	.00	.00	14	20	3.1	1.4	1.6	1.9
13	.00	.00	.00	.00	.00	.00	14	22	3.1	1.6	1.7	1.8
14	.00	.00	.00	.00	.00	.00	18	24	2.8	1.3	1.8	1.6
15	.00	.00	.00	.00	.00	.00	16	27	2.5	.41	1.8	1.4
16	.00	.00	.00	.00	.00	.00	18	29	2.0	.56	1.6	1.1
17	.00	.00	.00	.00	.00	.00	22	30	1.8	.86	1.4	.88
18	.00	.00	.00	.00	.00	.00	16	30	1.6	.98	1.3	.77
19	.00	.00	.00	.00	.00	.00	14	24	1.4	1.1	1.0	.78
20	.00	.00	.00	.00	.00	.00	13	20	1.1	1.1	.76	.55
21	.00	.00	.00	.00	.00	.00	14	19	1.2	1.0	.29	.22
22	.00	.00	.00	.00	.00	.00	15	18	1.1	1.0	.03	.01
23	.00	.00	.00	.00	.00	.00	13	15	1.1	.93	.23	.00
24	.00	.00	.00	.00	.00	.00	12	13	2.1	.77	1.2	.00
25	.00	.00	.00	.00	.00	.00	12	12	3.3	.60	1.1	.00
26	.00	.00	.00	.00	.00	.00	14	10	3.7	.44	.99	.00
27	.00	.00	.00	.00	.00	.00	17	10	3.5	.33	.68	.00
28	.00	.00	.00	.00	.00	1.0	18	9.0	2.9	.28	.66	.00
29	.00	.00	.00	.00	---	5.0	20	8.0	2.9	.27	.53	.00
30	.00	.00	.00	.00	---	7.0	24	8.7	2.8	.47	.26	.00
31	.00	---	.00	.00	---	9.0	---	8.8	---	.36	.34	---
TOTAL	.00	.00	.00	.00	.00	22.00	458	602.5	114.1	27.38	22.60	33.71
MEAN	.000	.000	.000	.000	.000	.71	15.3	19.4	3.80	.88	.73	1.12
MAX	.00	.00	.00	.00	.00	9.0	24	30	8.9	2.4	1.8	3.1
MIN	.00	.00	.00	.00	.00	.00	10	8.0	1.1	.27	.00	.00
AC-FT	.00	.00	.00	.00	.00	44	908	1200	226	54	45	67

CAL YR 1977 TOTAL 172.99 MEAN .47 MAX 4.1 MIN .00 AC-FT 343
WTR YR 1978 TOTAL 1280.29 MEAN 3.51 MAX 30 MIN .00 AC-FT 2540

09243700 MIDDLE CREEK ABOVE FOIDEL CREEK, NEAR OAK CREEK, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--September 1975 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1976 to current year.
WATER TEMPERATURES: April 1976 to current year.

INSTRUMENTATION.--Water-quality monitor since April 1976.

REMARKS.--Daily maximum and minimum specific-conductance data available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 872 micromhos Nov. 28, 1976; minimum, 117 micromhos Aug. 10, 1978.
WATER TEMPERATURES: Maximum, 31.5°C July 31, 1976; minimum, freezing point on many days during November 1976 to April 1977.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 564 micromhos Sept. 22; minimum, 117 micromhos Aug. 10.
WATER TEMPERATURES: Maximum, 29.5°C Aug. 2; minimum not determined.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
JAN									
24...	1030	.09	840	8.1	.5	10.6	390	130	93
APR									
18...	1300	16	430	8.3	6.5	--	200	73	49
MAY									
30...	1320	9.8	420	8.5	15.5	--	250	57	59
JUN									
19...	1300	1.5	500	8.0	22.0	--	270	42	66
JUL									
11...	1040	1.0	592	8.5	17.5	--	280	24	68
AUG									
01...	0945	.34	600	8.1	16.0	--	290	28	70
SEP									
13...	1235	1.8	310	8.2	15.0	--	150	33	36

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
JAN									
24...	39	42	.9	3.0	320	0	260	210	5.8
APR									
18...	20	17	.5	2.7	160	0	130	88	3.9
MAY									
30...	24	17	.5	4.4	230	0	190	79	4.7
JUN									
19...	26	25	.7	2.4	280	0	230	82	3.0
JUL									
11...	26	27	.7	2.9	300	4	250	74	2.7
AUG									
01...	28	28	.7	3.2	320	0	260	76	2.8
SEP									
13...	14	6.5	.2	1.5	140	0	110	41	1.1

09243700 MIDDLE CREEK ABOVE FOIDEL CREEK, NEAR OAK CREEK, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	BORON, DISSOLVED (UG/L AS B)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)
JAN 24...	.2	9.0	561	.14	.26	.05	60	30	120
APR 18...	.2	7.8	278	12.0	2.3	.01	60	40	60
MAY 30...	.2	8.5	311	8.23	.08	.01	50	620	140
JUN 19...	.2	11	354	1.43	.02	.01	70	220	80
JUL 11...	.2	10	363	1.02	.00	.02	70	50	50
AUG 01...	.2	5.6	372	.34	.01	.01	80	30	50
SEP 13...	.1	14	184	.89	.01	.02	10	110	30

DATE	TIME	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ALUMINUM, DISSOLVED (UG/L AS AL)	ANTIMONY, DISSOLVED (UG/L AS SB)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
JUN 19...	1300	--	--	6	--	1	--	4	--
SEP 13...	1235	2000	30	--	2	1	3	1	6

DATE	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	MOLYBDENUM, DISSOLVED (UG/L AS MO)
JUN 19...	3	--	--	5	--	--	.0	--	--
SEP 13...	2	3200	18	0	70	.0	.0	5	0

DATE	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DISSOLVED (MG/L AS C)
JUN 19...	--	0	--	1	--	20	7.9	8.1
SEP 13...	0	0	0	0	10	10	4.8	4.1

09243700 MIDDLE CREEK ABOVE FOIDEL CREEK, NEAR OAK CREEK, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							---	377	418		---	296
2							---	373	---		---	297
3							---	375	---		---	300
4							---	374	---		---	289
5							---	380	---		---	292
6							---	381	---		---	300
7							---	379	---		---	313
8							---	383	---		---	315
9							---	394	---		---	305
10							---	392	---		129	275
11							---	380	---		139	266
12							---	380	---		212	293
13							462	380	---		247	312
14							425	379	---		263	329
15							420	378	---		269	275
16							409	377	---		286	347
17							388	364	---		239	398
18							401	356	---		238	435
19							406	370	---		280	463
20							407	389	---		311	491
21							397	385	---		339	508
22							392	383	---		350	532
23							392	386	---		---	---
24							396	391	---		329	---
25							393	388	---		319	---
26							390	393	---		300	---
27							380	391	---		299	---
28							375	401	---		289	---
29							370	406	---		288	---
30							372	407	---		316	---
31							---	452	---		311	---

09243700 MIDDLE CREEK ABOVE FOIDEL CREEK, NEAR OAK CREEK, CO--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	13.5	5.5	20.0	9.0	23.0	12.5	26.0	16.0	24.5	13.0
2	---	---	15.0	6.0	20.5	10.0	22.5	11.5	29.5	11.0	25.0	13.0
3	---	---	12.5	8.5	18.5	11.5	---	---	---	---	25.0	14.0
4	---	---	9.0	6.5	17.5	11.0	---	---	---	---	25.0	14.5
5	---	---	7.5	5.0	14.0	10.5	---	---	---	---	26.5	15.0
6	---	---	6.0	4.0	21.5	9.5	---	---	---	---	26.5	15.0
7	---	---	6.5	3.0	18.5	12.0	---	---	---	---	25.5	16.0
8	---	---	9.5	4.0	23.0	10.0	---	---	---	---	25.0	16.0
9	---	---	14.0	3.0	24.0	11.5	---	---	28.0	11.5	23.5	15.0
10	---	---	14.0	7.0	22.5	13.0	---	---	26.5	14.0	22.0	15.5
11	---	---	10.5	8.5	23.5	11.5	---	---	24.5	14.0	18.5	14.5
12	---	---	13.0	6.0	23.0	10.5	---	---	23.0	14.0	18.5	13.0
13	11.5	6.0	16.0	6.0	24.0	11.0	---	---	22.0	15.5	19.0	10.5
14	11.0	5.5	17.5	8.5	21.5	11.0	---	---	16.0	11.5	18.0	10.5
15	10.5	7.0	18.0	9.5	25.0	11.5	---	---	24.0	9.0	19.5	13.0
16	13.0	5.0	18.5	9.5	24.0	11.0	---	---	23.5	11.0	22.0	14.0
17	7.0	2.0	12.0	7.0	24.5	11.0	---	---	25.0	11.5	21.0	15.5
18	10.5	1.5	11.5	6.5	23.5	10.0	---	---	18.5	12.0	16.0	12.0
19	12.0	2.5	17.5	7.0	22.5	12.5	---	---	22.0	8.5	12.5	11.0
20	13.5	4.5	16.0	9.5	25.5	11.0	---	---	22.0	10.5	13.0	8.5
21	9.0	3.5	14.0	11.0	25.5	11.0	---	---	24.0	12.0	16.0	6.0
22	8.5	1.0	17.5	9.0	26.5	12.0	---	---	23.0	15.0	17.0	6.5
23	11.0	4.5	17.5	10.0	28.0	12.0	---	---	25.0	12.0	---	---
24	14.0	5.0	16.5	10.0	25.0	13.5	---	---	22.0	12.5	---	---
25	13.0	8.5	13.0	9.5	24.0	13.5	---	---	23.0	13.5	---	---
26	11.0	7.0	18.5	8.0	22.5	11.0	---	---	25.0	13.0	---	---
27	10.0	7.0	14.5	10.5	21.5	13.0	---	---	25.0	12.5	---	---
28	9.0	6.5	17.0	8.5	27.0	13.0	---	---	24.0	11.5	---	---
29	12.0	5.5	19.0	9.0	21.5	13.5	---	---	25.0	11.5	---	---
30	11.0	7.0	20.5	10.5	23.5	13.0	---	---	24.5	11.0	---	---
31	---	---	19.0	10.5	---	---	---	---	21.5	13.0	---	---

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

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DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
NOV 22...	1200	.29	68	.06
DEC 07...	1200	.25	21	.01
FEB 28...	1300	.99	21	.06
MAR 29...	1000	--	37	.13
APR 20...	1230	1.2	34	.11
MAY 11...	1400	.40	30	.03
JUN 27...	1100	2.3	32	.20
JUL 13...	1230	.15	146	.06

09243700 MIDDLE CREEK ABOVE FOIDEL CREEK, NEAR OAK CREEK, CO--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
JAN				
24...	1000	.09	15	<.01
APR				
18...	1310	16	50	2.2
MAY				
30...	1320	9.8	85	2.2
JUN				
19...	1330	1.5	9	.04
19...	1335	1.5	12	.05
JUL				
1[illegible]...	1040	1.0	42	.12
AUG				
01...	0940	.34	30	.03

09243800 FOIDEL CREEK NEAR OAK CREEK, CO

LOCATION.--Lat 40°20'45", long 107°05'04", in NW$_4$SW$_4$ sec.31, T.5 N., R.86 W., Routt County, Hydrologic Unit 14050001, on right bank 2.3 mi (3.7 km) downstream from Reservoir No. 1, 6.9 mi (11.1 km) upstream from mouth, and 8.7 mi (14 km) northwest of Oak Creek.

DRAINAGE AREA.--8.61 mi^2 (22.30 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1975 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,880 ft (2,110 m), from topographic map.

REMARKS.--Records fair. Numerous beaver dams above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 30 ft^3/s (0.850 m^3/s) Apr. 7, 1978, gage height, 2.97 ft (0.905 m); no flow many days most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 30 ft^3/s (0.850 m^3/s) at 2000 Apr. 7, gage height, 2.97 ft (0.905 m); no flow Oct. 1 to Apr. 3, June 23 to Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	4.5	.80	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	3.5	.75	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	3.0	3.6	.70	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	5.0	3.6	.95	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	6.1	4.3	1.3	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	9.9	5.0	1.0	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	17	4.8	.85	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	16	5.7	1.3	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	11	6.4	.65	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	5.7	5.8	.64	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	9.7	3.8	.50	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	11	3.3	.42	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	8.4	3.5	.34	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	11	3.2	.27	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	8.9	2.6	.22	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	8.6	2.5	.08	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	7.9	3.4	.05	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	4.2	2.8	.04	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	3.5	2.4	.04	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	3.9	1.8	.02	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	4.6	1.8	.02	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	4.2	1.6	.01	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	3.1	1.2	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	3.3	1.2	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	3.5	1.1	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	3.4	1.1	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	3.2	1.1	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	3.5	.99	.00	.00	.00	.00
29	.00	.00	.00	.00	---	.00	3.9	.92	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	5.0	.80	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.85	---	.00	.00	---
TOTAL	.00	.00	.00	.00	.00	.00	188.50	89.16	11.15	.00	.00	.00
MEAN	.000	.000	.000	.000	.000	.000	6.28	2.88	.37	.000	.000	.000
MAX	.00	.00	.00	.00	.00	.00	17	6.4	1.3	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.80	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	.00	.00	374	177	22	.00	.00	.00

CAL YR 1977 TOTAL 7.91 MEAN .022 MAX .16 MIN .00 AC-FT 16
WTR YR 1978 TOTAL 288.81 MEAN .79 MAX 17 MIN .00 AC-FT 573

09243800 FOIDEL CREEK NEAR OAK CREEK, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--September 1975 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: May 1976 to current year.
WATER TEMPERATURES: May 1976 to current year.

INSTRUMENTATION.--Water-quality monitor since May 1976.

REMARKS.--Daily maximum and minimum specific-conductance data available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,240 micromhos May 19, 1977; minimum, 208 micromhos May 15, 1976.
WATER TEMPERATURES: Maximum, 24.5°C June 19, 1976; minimum, 0.0°C Mar. 22, 1977.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Not determined.
WATER TEMPERATURES: Not determined.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
APR 18...	1430	4.0	459	8.2	9.0	220	87	48	24
MAY 30...	1810	.84	600	8.2	18.5	310	84	71	33
JUN 19...	1100	.04	700	8.0	17.0	370	86	85	39

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
APR 18...	15	.4	2.9	160	0	130	120	3.9	.2
MAY 30...	17	.4	2.6	280	0	230	100	3.8	.3
JUN 19...	21	.5	3.1	350	0	290	100	3.4	.3

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
APR 18...	6.7	302	3.28	.46	.03	80	50	10
MAY 30...	9.4	377	.86	.35	.01	70	280	70
JUN 19...	11	436	.05	.01	.01	90	320	230

09243800 FOIDEL CREEK NEAR OAK CREEK, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	ANTI-MONY, DIS-SOLVED (UG/L AS SB)	ARSENIC DIS-SOLVED (UG/L AS AS)	CADMIUM DIS-SOLVED (UG/L AS CD)	COPPER, DIS-SOLVED (UG/L AS CU)	LEAD, DIS-SOLVED (UG/L AS PB)	MERCURY DIS-SOLVED (UG/L AS HG)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)
JUN 19...	1100	0	2	2	4	8	.0	0	0	20	9.2	11

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	13.0	8.0								
2	---	---	16.5	7.5								
3	6.5	2.5	14.5	10.0								
4	9.5	2.5	11.0	8.0								
5	6.5	2.5	9.5	6.5								
6	11.0	3.0	8.0	5.5								
7	15.0	3.5	8.5	4.5								
8	13.5	2.0	10.5	5.5								
9	5.5	3.0	16.5	5.0								
10	8.5	1.5	17.5	8.0								
11	13.5	4.0	13.5	10.0								
12	12.0	3.0	15.0	7.5								
13	8.5	4.5	18.5	8.0								
14	10.0	4.5	19.5	11.0								
15	12.0	5.5	20.0	11.0								
16	12.0	4.5	14.0	7.0								
17	7.0	3.0	10.5	5.5								
18	8.5	1.5	9.0	4.5								
19	11.0	3.5	13.0	5.5								
20	13.0	6.0	14.0	7.5								
21	10.0	6.0	13.5	9.5								
22	9.0	3.5	18.5	11.0								
23	11.5	6.0	18.5	13.0								
24	14.0	5.0	19.0	13.0								
25	14.0	9.5	16.0	12.5								
26	13.0	8.5	18.0	11.0								
27	11.5	8.5	16.0	13.0								
28	10.0	8.0	16.0	10.5								
29	12.0	7.5	17.5	11.0								
30	12.0	8.5	19.0	12.0								
31	---	---	---	---								

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
MAR 18...	1000	.10	50	.01
APR 14...	1030	.08	7	.00
MAY 11...	0900	.06	46	.01

09243800 FOIDEL CREEK NEAR OAK CREEK, CO--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
APR				
18...	1430	4.0	37	.40
MAY				
30...	1810	.84	33	.07
JUN				
19...	1140	.04	29	<.01

09243900 FOIDEL CREEK AT MOUTH, NEAR OAK CREEK, CO

LOCATION.--Lat 40°23'25", long 106°59'39", in SE¼SE¼ sec.14, T.5 N., R.86 W., Routt County, Hydrologic Unit 14050001, on left bank 0.9 mi (1.4 km) upstream from mouth and 13.6 mi (21.9 km) northwest of Oak Creek.

DRAINAGE AREA.--17.5 mi^2 (45.3 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1975 to current year.

GAGE.--Water-stage recorder. Altitude of gaye is 6,730 ft (2,051 m), from topographic map.

REMARKS.--Records good. No regulation or diversions.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 69 ft^3/s (1.95 m^3/s) Mar. 29, 1976, gage height, 4.84 ft (1.475 m); maximum gage height, 6.00 ft (1.829 m) Mar. 25, 1976 (backwater from ice); no flow many days eacn year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 32 ft^3/s (0.906 m^3/s) Apr. 8, gage height, 3.72 ft (1.134 m); no flow many days.

REVISIONS.--The maximum discharge for water year 1976 has been revised to 25 ft^3/s (0.708 m^3/s) date, unknown, gage height, unknown (backwater from ice); revised daily discharges, in cubic feet per second, are given below. These figures supersede those published in WDR CO-76-2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.10	7.0	20	2.1	.68	.00	.00	.00
2	.00	.00	.00	.00	.12	6.8	18	2.1	.59	.00	.00	.00
3	.00	.00	.00	.00	.14	6.4	15	2.2	.53	.00	.00	.00
4	.00	.00	.00	.00	.15	6.0	13	2.2	.40	.00	.00	.00
5	.00	.00	.00	.00	.15	5.8	11	2.3	.38	.00	.00	.00
6	.00	.00	.00	.00	.15	5.0	9.9	2.3	.32	.00	.00	.00
7	.00	.00	.00	.00	.15	4.5	8.0	2.4	.23	.00	.00	.00
8	.00	.00	.00	.00	.15	4.0	7.2	2.6	.23	.00	.00	.00
9	.00	.00	.00	.00	.15	4.5	7.6	3.4	.18	.00	.00	.00
10	.00	.00	.00	.00	.15	5.0	6.8	3.0	.14	.00	.00	.00
11	.00	.00	.00	.00	.15	5.0	6.2	2.6	.12	.00	.00	.00
12	.00	.00	.00	.00	.15	5.0	6.2	2.2	.05	.00	.00	.00
13	.00	.00	.00	.00	.15	4.8	6.8	2.0	.03	.00	.00	.00
14	.00	.00	.00	.00	.15	4.6	5.6	1.6	.01	.00	.00	.00
15	.00	.00	.00	.00	.15	4.5	5.2	1.3	.05	.00	.00	.00
16	.00	.00	.00	.00	.15	4.8	4.6	1.2	.07	.00	.00	.00
17	.00	.00	.00	.00	.15	5.0	4.0	1.0	.12	.00	.00	.00
18	.00	.00	.00	.00	.15	5.5	3.6	.96	.20	.00	.00	.00
19	.00	.00	.00	.00	.15	6.0	3.4	.89	.40	.00	.00	.00
20	.00	.00	.00	.00	.15	6.5	3.0	.89	.45	.00	.00	.00
21	.00	.00	.00	.01	.16	6.5	3.0	.93	.40	.00	.00	.00
22	.00	.03	.00	.01	.16	7.0	2.9	1.1	.23	.00	.00	.00
23	.00	.07	.00	.02	.19	7.5	3.0	1.3	.23	.00	.00	.00
24	.00	.00	.00	.03	.21	8.0	3.0	1.4	.32	.00	.00	.00
25	.00	.00	.00	.04	.22	8.5	3.0	1.4	.26	.00	.00	.00
26	.00	.00	.00	.05	.32	9.5	3.1	1.3	.23	.00	.00	.00
27	.00	.00	.00	.05	1.0	11	3.3	1.2	.14	.00	.00	.00
28	.00	.00	.00	.05	2.0	12	3.5	.89	.05	.00	.00	.00
29	.00	.00	.00	.06	5.0	13	3.7	.85	.01	.00	.00	.00
30	.00	.00	.00	.06	---	13	2.0	.76	.00	.00	.00	.00
31	.00	---	.00	.08	---	16	---	.72	---	.00	.00	---
TOTAL	.00	.10	.00	.46	12.17	218.7	195.6	51.09	7.05	.00	.00	.00
MEAN	.000	.003	.000	.015	.42	7.05	6.52	1.65	.24	.000	.000	.000
MAX	.00	.07	.00	.08	5.0	16	20	3.4	.68	.00	.00	.00
MIN	.00	.00	.00	.00	.10	4.0	2.0	.72	.00	.00	.00	.00
AC-FT	.00	.2	.00	.9	24	434	388	101	14	.00	.00	.00

WTR YR 1976 TOTAL 485.17 MEAN 1.33 MAX 20 MIN .00 AC-FT 962

NOTE.--NO GAGE-HEIGHT RECORD NOV. 26 TO JAN. 8.

09243900 FOIDEL CREEK AT MOUTH, NEAR OAK CREEK, CO--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	28	7.8	2.2	.08	.00	.00
2	.00	.00	.00	.00	.00	.00	26	5.7	2.1	.07	.00	.00
3	.00	.00	.02	.00	.00	.00	21	5.3	4.1	.06	.00	.00
4	.00	.00	.01	.00	.00	.00	15	5.5	6.6	.05	.00	.00
5	.00	.00	.00	.00	.00	.00	20	6.5	5.6	.04	.00	.00
6	.00	.00	.00	.00	.00	.00	17	12	3.6	.03	.00	.00
7	.00	.00	.00	.00	.00	.00	21	9.6	3.1	.02	.00	.00
8	.00	.00	.00	.00	.00	.00	27	8.8	4.6	.02	.00	.00
9	.00	.00	.00	.00	.00	.00	25	9.0	3.4	.01	.00	.00
10	.00	.00	.00	.00	.00	.00	16	9.0	2.7	.01	.00	.00
11	.00	.00	.00	.00	.00	.00	17	9.0	1.8	.01	.00	.00
12	.00	.00	.00	.00	.00	.00	23	9.0	1.6	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	20	9.0	2.2	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	21	9.0	1.7	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	17	9.2	2.0	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	14	8.7	1.4	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	15	8.5	1.0	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	11	11	.89	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	8.7	9.1	.58	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	6.3	8.1	.76	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	7.6	5.1	1.2	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	6.9	5.0	.53	.00	.00	.00
23	.00	.00	.00	.00	.00	5.0	5.4	4.0	.29	.00	.00	.00
24	.00	.00	.00	.00	.00	10	4.6	5.3	.20	.00	.00	.00
25	.00	.00	.00	.00	.00	14	4.8	3.2	.18	.00	.00	.00
26	.00	.00	.00	.00	.00	22	3.2	2.5	.16	.00	.00	.00
27	.00	.00	.00	.00	.00	20	4.6	2.0	.14	.00	.00	.00
28	.00	.00	.00	.00	.00	16	5.0	1.6	.12	.00	.00	.00
29	.00	.00	.00	.00	---	18	5.9	2.0	.10	.00	.00	.00
30	.00	.00	.00	.00	---	19	8.4	2.1	.09	.00	.00	.00
31	.00	---	.00	.00	---	20	---	4.8	---	.00	.00	---
TOTAL	.00	.00	.03	.00	.00	144.00	425.4	207.4	54.94	.40	.00	.00
MEAN	.000	.000	.001	.000	.000	4.65	14.2	6.69	1.83	.013	.000	.000
MAX	.00	.00	.02	.00	.00	22	28	12	6.6	.08	.00	.00
MIN	.00	.00	.00	.00	.00	.00	3.2	1.6	.09	.00	.00	.00
AC-FT	.00	.00	.06	.00	.00	286	844	411	109	.8	.00	.00

CAL YR 1977 TOTAL 25.73 MEAN .070 MAX 1.5 MIN .00 AC-FT 51
WTR YR 1978 TOTAL 832.17 MEAN 2.28 MAX 28 MIN .00 AC-FT 1650

09243900 FOIDEL CREEK AT MOUTH, NEAR OAK CREEK, CO--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1976 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1976 to current year.
WATER TEMPERATURE: April 1976 to current year.

INSTRUMENTATION.--Water-quality monitor since April 1976.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 2,060 micromhos June 4, 5, 1978; minimum, 340 micromhos Apr. 11, 1978.
WATER TEMPERATURES: Maximum, 27.5°C June 10, 1976; minimum, not determined.
SEDIMENT CONCENTRATIONS: Maximum daily, 530 mg/L, estimated Apr. 1, 1978; no flow many days each year.
SEDIMENT LOADS: Maximum daily, 50 tons (45 t), estimated July 29, 1978; no flow many days each year.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 2,060 micromhos June 4, 5; minimum, 340 micromhos Apr. 11.
WATER TEMPERATURES: Maximum, 25.5°C June 28; minimum, not determined.
SEDIMENT CONCENTRATIONS: Maximum daily, 530 mg/L, estimated Apr. 1; no flow many days during year.
SEDIMENT LOADS: Maximum daily, 50 tons (45 t), estimated July 29; no flow many days during year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
APR									
18...	1145	10	960	8.3	7.0	480	320	110	49
MAY									
30...	1440	2.2	720	8.4	19.5	370	120	87	36
JUN									
19...	1500	.48	1000	8.0	21.0	500	270	110	55
JUL									
11...	1145	.01	900	8.2	22.0	420	180	91	47

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
APR									
18...	31	.6	4.0	190	0	160	340	5.4	.2
MAY									
30...	33	.8	3.5	300	0	246	150	7.3	.3
JUN									
19...	50	1.0	3.4	280	0	230	320	7.4	.2
JUL									
11...	53	1.1	2.1	290	0	240	260	6.8	.2

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
APR								
18...	7.1	663	18.6	5.0	.05	100	50	60
MAY								
30...	4.4	484	2.87	3.2	.01	80	--	80
JUN								
19...	--	--	.89	1.2	.00	90	190	20
JUL								
11...	3.2	607	.02	.01	.02	70	70	0

09243900 FOIDEL CREEK AT MOUTH, NEAR OAK CREEK, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	ANTI-MONY, DIS-SOLVED (UG/L AS SB)	ARSENIC DIS-SOLVED (UG/L AS AS)	CADMIUM DIS-SOLVED (UG/L AS CD)	COPPER, DIS-SOLVED (UG/L AS CU)	LEAD, DIS-SOLVED (UG/L AS PB)	MERCURY DIS-SOLVED (UG/L AS HG)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)
JUN												
19...	1500	6	1	5	6	9	.0	0	1	20	13	12

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							---	649	1560	1420		
2							---	643	1000	1440		
3							---	640	1430	1330		
4							---	629	1980	1090		
5							---	619	1890	---		
6							582	954	1120	---		
7							548	1040	939	---		
8							514	711	1040	---		
9							466	1230	1020	---		
10							532	1320	891	---		
11							524	1450	1230	---		
12							452	1540	---	---		
13							571	1600	---	---		
14							565	1580	---	---		
15							531	1580	---	---		
16							516	1600	---	---		
17							520	1670	---	---		
18							843	1570	---	---		
19							1090	1550	1020	---		
20							814	1600	1080	---		
21							863	1560	1050	---		
22							731	1020	1070	---		
23							640	1200	1090	---		
24							663	1340	1130	---		
25							662	1780	1100	---		
26							658	1270	976	---		
27							663	1180	1050	---		
28							654	1000	964	---		
29							641	820	1320	---		
30							643	765	1460	---		
31							---	1220	---	---		

09243900 FOIDEL CREEK AT MOUTH, NEAR OAK CREEK, CO--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	16.0	6.5	19.5	10.5	22.5	13.0				
2	---	---	19.0	7.5	19.5	11.5	22.5	12.5				
3	---	---	16.0	10.5	18.5	12.5	23.0	11.5				
4	---	---	11.5	7.5	17.0	12.5	22.0	9.5				
5	---	---	[illegible]	5.0	14.5	12.0	---	---				
6	14.0	6.5	9.0	4.5	18.5	10.0	---	---				
7	16.0	5.0	9.5	4.0	16.5	13.0	---	---				
8	14.5	6.5	12.5	4.5	20.0	11.5	---	---				
9	8.0	3.5	17.0	4.0	20.5	13.0	---	---				
10	11.5	2.0	16.5	8.0	20.0	14.0	---	---				
11	15.0	4.0	12.5	9.5	20.5	13.5	---	---				
12	14.5	4.0	16.0	6.5	---	---	---	---				
13	10.5	5.5	20.0	7.5	---	---	---	---				
14	12.5	4.5	21.5	10.5	---	---	---	---				
15	12.5	7.0	22.0	11.5	---	---	---	---				
16	13.5	5.0	22.5	11.5	---	---	---	---				
17	7.5	2.5	14.5	9.0	---	---	---	---				
18	11.5	1.5	13.0	7.5	---	---	---	---				
19	14.0	3.0	20.0	8.5	21.0	15.0	---	---				
20	15.5	5.5	21.5	11.0	22.0	11.5	---	---				
21	11.0	5.5	16.5	13.0	21.5	12.5	---	---				
22	10.0	2.5	19.5	11.0	22.5	12.5	---	---				
23	12.0	5.0	18.5	12.0	22.5	13.0	---	---				
24	17.5	5.0	20.0	11.5	22.5	13.5	---	---				
25	15.5	4.0	14.5	11.0	22.5	12.5	---	---				
26	14.0	7.5	18.5	10.0	23.0	9.0	---	---				
27	12.5	8.0	15.5	12.0	21.0	12.0	---	---				
28	10.5	7.5	16.5	10.5	25.5	12.5	---	---				
29	14.5	6.0	19.0	10.5	22.5	13.0	---	---				
30	13.5	8.0	20.0	13.0	22.5	14.5	---	---				
31	---	---	19.0	11.0	---	---	---	---				

09243900 FOIDEL CREEK AT MOUTH, NEAR OAK CREEK, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JANUARY			FEBRUARY			MARCH	
1	.00			.00			.00		.00
2	.00			.00			.00		.00
3	.00			.00			.00		.00
4	.00			.00			.00		.00
5	.00			.00			.00		.00
6	.00			.00			.00		.00
7	.00			.00			.00		.00
8	.00			.00			.00		.00
9	.00			.00			.00		.00
10	.00			.00			.00		.00
11	.00			.00			.00		.00
12	.00			.00			.00		.00
13	.00			.00			.00		.00
14	.00			.00			.00		.00
15	.00			.00			.00		.00
16	.00			.00			.00		.00
17	.00			.00			.00		.00
18	.00			.00			.00		.00
19	.00			.00			.00		.00
20	.00			.00			.00		.00
21	.00			.00			.00		.00
22	.00			.00			.00		.00
23	.00			.00			5.0		2.5
24	.00			.00			10		7.0
25	.00			.00			14		14
26	.00			.00			22		28
27	.00			.00			20		24
28	.00			.00			16		17
29	.00			---			18		20
30	.00			---			19		22
31	.00			---			20		24
TOTAL	0.00			0.00			144.00		158.50

09243900 FOIDEL CREEK AT MOUTH, NEAR OAK CREEK, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	28	---	40	7.8	127	2.7	2.2	98	.58
2	26	---	37	5.7	---	1.2	2.1	122	.69
3	21	---	26	5.3	---	1.0	4.1	140	1.5
4	15	---	15	5.5	---	1.1	6.6	96	1.7
5	20	---	24	6.5	---	1.6	5.6	92	1.4
6	17	430	20	12	---	5.6	3.6	106	1.0
7	21	410	23	9.6	---	3.5	3.1	109	.91
8	27	520	38	8.8	124	2.9	4.6	100	1.2
9	25	420	28	9.0	---	3.2	3.4	104	.95
10	16	---	11	9.0	---	3.2	2.7	70	.51
11	17	---	16	9.0	---	3.2	1.8	64	.31
12	23	---	27	9.0	---	3.2	1.6	30	.13
13	20	---	22	9.0	---	3.2	2.2	70	.42
14	21	320	18	9.0	---	3.2	1.7	77	.35
15	17	170	7.8	9.2	---	3.4	2.0	81	.44
16	14	130	4.9	8.7	---	2.9	1.4	62	.23
17	15	---	7.7	8.5	104	2.4	1.8	75	.20
18	11	205	6.1	11	---	4.4	.89	58	.14
19	8.7	190	4.5	9.1	---	3.2	.58	65	.10
20	6.3	---	2.7	8.1	---	2.5	.76	120	.25
21	7.6	---	3.7	5.1	---	1.0	1.2	172	.56
22	6.9	---	3.0	5.0	---	.95	.53	150	.21
23	5.4	---	1.8	4.0	---	.60	.29	200	.16
24	4.6	116	1.4	5.3	100	1.4	.20	---	.10
25	4.8	112	1.4	3.2	---	.38	.18	---	.08
26	3.2	70	.60	2.5	---	.23	.16	---	.06
27	4.6	76	.94	2.0	---	.15	.14	---	.04
28	5.0	74	1.0	1.6	---	.09	.12	---	.02
29	5.9	78	1.2	2.0	---	.15	.10	---	.02
30	8.4	109	2.5	2.1	26	.15	.09	---	.01
31	---	---	---	4.8	106	1.4	---	---	---
TOTAL	425.4	---	396.24	207.4	---	64.10	54.94	---	14.27

09243900 FOIDEL CREEK AT MOUTH, NEAR OAK CREEK, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JULY			AUGUST			SEPTEMBER	
1	.08	---	.01	.00			.00		
2	.07	---	.01	.00			.00		
3	.06	---	.01	.00			.00		
4	.05	---	.01	.00			.00		
5	.04	---	.01	.00			.00		
6	.03	---	.01	.00			.00		
7	.02	---	.00	.00			.00		
8	.02	---	.00	.00			.00		
9	.01	---	.00	.00			.00		
10	.01	115	.00	.00			.00		
11	.01	28	.00	.00			.00		
12	.00	---	.00	.00			.00		
13	.00	---	.00	.00			.00		
14	.00	---	.00	.00			.00		
15	.00	---	.00	.00			.00		
16	.00	---	.00	.00			.00		
17	.00	---	.00	.00			.00		
18	.00	---	.00	.00			.00		
19	.00	---	.00	.00			.00		
20	.00	---	.00	.00			.00		
21	.00	---	.00	.00			.00		
22	.00	---	.00	.00			.00		
23	.00	---	.00	.00			.00		
24	.00	---	.00	.00			.00		
25	.00	---	.00	.00			.00		
26	.00	---	.00	.00			.00		
27	.00	---	.00	.00			.00		
28	.00	---	.00	.00			.00		
29	.00	---	.00	.00			.00		
30	.00	---	.00	.00			.00		
31	.00	---	.00	.00			---		
TOTAL	0.40	---	0.06	0.00			0.00		
YEAR	832.[illegible]7		633.17						

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM (70332)	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM (70333)	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM (70334)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM (70337)	SED. SUSP. FALL DIAM. % FINER THAN .004 MM (70338)	SED. SUSP. FALL DIAM. % FINER THAN .016 MM (70340)
APR											
06...	1600	13	422	15	92	--	--	--	--	--	--
07...	1630	23	407	25	89	--	--	--	--	--	--
09...	1710	32	249	22	94	97	99	100	78	79	84

09244410 YAMPA RIVER BELOW DIVERSION, NEAR HAYDEN, CO

LOCATION.--Lat 40°29'18", long 107°09'33", in NW¼SW¼ sec.9, T.6 N., R.87 W., Routt County, Hydrologic Unit 14050001, in bay of Colorado-Ute Electric Co. pumphouse on left bank 300 ft (91 m) downstream from U.S. Highway 40, 0.1 mi (0.2 km) upstream from Sage Creek, 0.5 mi (0.8 km) downstream from diversion point of Gibraltar Canal, and 4.7 mi (7.6 km) east of Hayden.

DRAINAGE AREA.--1,430 mi² (3,700 km²), approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1965 to current year. Prior to October 1972, records included flow in Gibraltar Canal.

GAGE.--Water-stage recorder. Altitude of gage is 6,380 ft (1,945 m), from topographic map.

REMARKS.--Records good except those for winter period, which are fair. Records show flow of river below Gibraltar Canal diversion. Natural flow of stream affected by diversions for irrigation of about 30,000 acres (121 km²) above and 200 acres (809,000 m²) below station, transbasin diversions, storage reservoirs, and return flow from irrigated areas.

AVERAGE DISCHARGE.--13 years, 1,054 ft³/s (29.85 m³/s), 763,600 acre-ft/yr (942 hm³/yr); does not include flow in Gibraltar Canal.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,500 ft³/s (467 m³/s) Apr. 27, 1974, gage height, 11.90 ft (3.627 m), from rating curve extended above 12,000 ft³/s (340 m³/s); minimum daily, 5.1 ft³/s (0.14 m³/s) July 19, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 10,050 ft³/s (285 m³/s) at 1300 June 11, gage height, 10.41 ft (3.173 m), only peak above base of 5,000 ft³/s (14 m³/s); minimum daily, 75 ft³/s (2.12 m³/s) Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	75	118	108	110	135	190	1280	2960	5530	5600	837	175
2	81	112	125	110	138	192	1420	3060	5760	5050	811	166
3	83	118	170	110	140	195	1470	3440	5760	4720	704	143
4	81	118	175	110	140	200	1410	3450	6120	4350	634	130
5	83	118	170	110	140	200	1480	2960	6000	3920	578	135
6	91	122	160	110	140	200	1440	2660	5540	3500	552	178
7	175	125	150	110	142	210	1630	2460	5620	3240	519	170
8	221	138	140	110	145	215	2070	2370	6000	3180	489	164
9	170	168	135	115	145	220	2320	2150	6550	3000	460	164
10	157	156	130	115	145	225	1830	2170	7360	2870	443	149
11	154	153	125	115	148	230	1890	2300	8990	2770	411	140
12	137	115	125	115	150	240	2440	2310	8560	3350	400	158
13	142	100	115	118	150	250	2350	2410	7910	3050	441	165
14	135	98	110	120	150	250	2490	3030	8280	2560	551	149
15	135	107	110	120	153	260	2630	3640	8140	2350	723	100
16	132	102	105	120	155	270	2780	5410	8780	2260	678	93
17	130	96	105	121	158	270	2870	6160	8380	2500	491	92
18	125	97	105	122	160	280	1910	5280	7480	2390	410	135
19	122	108	105	123	162	290	1880	4120	7120	2030	427	188
20	118	196	105	126	165	300	2080	3770	6900	1900	379	254
21	115	98	105	130	170	310	2280	4230	6560	1770	343	234
22	118	108	100	135	170	320	1970	4620	6730	1560	325	238
23	125	125	96	140	175	330	1700	5470	6790	1360	311	316
24	122	130	96	140	178	340	1760	5960	6960	1210	292	289
25	122	140	96	140	180	360	2020	6460	6920	1120	270	238
26	115	135	96	140	182	370	2380	5820	6620	1040	256	216
27	110	130	96	140	185	390	2910	5960	5880	971	237	193
28	105	130	97	140	190	466	2980	5530	5680	896	212	178
29	102	125	98	135	---	586	2790	5340	5560	876	195	162
30	112	120	99	135	---	791	2960	5940	5620	949	189	150
31	122	---	100	135	---	887	---	6000	---	849	181	---
TOTAL	3815	3706	3652	3820	4391	9837	63420	127440	204300	77191	13759	5262
MEAN	123	124	118	123	157	317	2114	4111	6810	2490	444	175
MAX	221	196	175	140	190	887	2980	6460	8990	5600	837	316
MIN	75	96	96	110	135	190	1280	2150	5530	849	181	92
AC-FT	7570	7350	7240	7580	8710	19510	125800	252800	405200	153100	27290	10440

CAL YR 1977 TOTAL 121768.5 MEAN 334 MAX 2440 MIN 5.1 AC-FT 241500
WTR YR 1978 TOTAL 520593.0 MEAN 1426 MAX 8990 MIN 75 AC-FT 1033000

09244410 YAMPA RIVER BELOW DIVERSION, NEAR HAYDEN, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--June 1975 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
OCT 14...	1200	131	250	7.6	5.5	9.5	3.5	110	15	29	8.0
NOV 14...	1200	93	350	7.5	1.5	11.4	--	120	8	30	9.8
DEC 19...	1045	106	260	7.5	.0	10.8	--	110	2	29	8.8
JAN 19...	1030	E170	270	8.3	.0	11.4	--	120	26	31	9.4
FEB 16...	1430	156	250	7.5	1.0	11.0	--	110	14	30	9.2
MAR 23...	0920	E400	444	8.1	1.5	--	--	160	63	35	18
APR 13...	0930	2250	320	7.7	4.0	10.2	--	140	56	33	13
MAY 30...	1215	5060	90	7.6	7.5	9.5	--	39	7	11	2.7
JUN 20...	1300	7300	60	7.5	9.0	11.5	--	24	3	6.6	1.8
JUL 18...	1545	2280	80	7.2	16.5	8.5	--	34	3	9.3	2.5
AUG 16...	1330	711	160	8.0	16.0	8.6	--	63	7	17	5.1
SEP 14...	1115	146	260	7.6	12.5	8.8	--	99	9	26	8.3

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
OCT 14...	15	.6	2.5	110	0	90	32	8.7	.2	7.1	157
NOV 14...	22	.9	2.6	140	0	110	36	12	.2	10	192
DEC 19...	21	.9	2.2	130	0	110	38	11	.2	10	184
JAN 19...	20	.8	2.1	110	0	90	50	10	.3	13	190
FEB 16...	20	.8	2.2	120	0	98	35	10	.2	13	179
MAR 23...	31	1.1	2.3	120	0	98	100	9.4	.7	16	272
APR 13...	14	.5	2.6	98	0	80	66	3.9	.1	10	191
MAY 30...	2.9	.2	.9	38	0	31	7.1	1.0	.1	8.0	53
JUN 20...	1.9	.2	.6	25	0	21	5.0	.6	.1	7.4	37
JUL 18...	3.4	.3	.8	37	0	30	9.5	1.3	.1	7.1	52
AUG 16...	6.7	.4	1.2	69	0	57	15	2.4	.1	7.6	89
SEP 14...	15	.7	2.0	110	0	90	30	7.8	.2	5.7	149

E ESTIMATED.

09244410 YAMPA RIVER BELOW DIVERSION, NEAR HAYDEN, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	BORON, DISSOLVED (UG/L AS B)	IRON, DISSOLVED (UG/L AS FE)	PHYTOPLANKTON, TOTAL (CELLS PER ML)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DISSOLVED (MG/L AS C)
OCT 14...	.00	.00	.43	.43	.43	.01	50	70	1700	--	--
NOV 14...	.01	.03	.61	.64	.65	.07	60	50	--	3.5	3.6
DEC 19...	.22	.06	.24	.30	.52	.05	50	30	--	3.2	3.1
JAN 19...	.20	.23	.97	1.2	1.4	.08	60	160	--	4.2	3.0
FEB 16...	.17	.16	.18	.34	.51	.09	50	110	--	4.2	4.5
MAR 23...	.93	.14	.65	.79	1.7	.16	60	190	--	5.7	6.8
APR 13...	1.1	.10	1.0	1.1	2.2	.24	50	150	--	11	7.3
MAY 30...	.04	.00	.99	.95	4.4	.01	40	100	--	7.2	5.7
JUN 20...	.03	.00	.61	.61	.64	.05	20	160	--	5.7	5.2
JUL 18...	.01	.00	.28	.28	.29	.04	20	90	--	7.1	4.9
AUG 16...	.00	.00	.40	.40	.40	.03	40	100	--	4.8	5.2
SEP 14...	.01	.00	.34	.34	.35	.03	40	80	--	4.1	5.5

DATE	TIME	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BERYLLIUM, DISSOLVED (UG/L AS BE)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)
MAY 30...	1215	1200	50	2	1	0	0	1	3
SEP 14...	1115	70	20	1	1	0	0	0	0

DATE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)
MAY 30...	15	5	3	5	18	18	80	0	.1
SEP 14...	10	10	6	1	4	0	10	10	.0

DATE	MERCURY DISSOLVED (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	VANADIUM, DISSOLVED (UG/L AS V)	VANADIUM, TOTAL (UG/L AS V)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)
MAY 30...	.0	5	5	0	0	--	1.0	--	--
SEP 14...	.0	3	0	0	0	4.7	--	10	10

09244410 YAMPA RIVER BELOW DIVERSION, NEAR HAYDEN, CO--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT				
13...	1200	130	8	2.8
NOV				
16...	1200	119	8	2.6
DEC				
16...	1100	52	3	.43
JAN				
12...	1200	74	100	20
FEB				
09...	1200	75	6	1.2
MAR				
16...	1100	89	24	5.8
APR				
13...	1030	515	49	68
MAY				
17...	1230	1520	29	119
JUN				
07...	1030	2290	44	290
SEP				
28...	1055	77	8	1.7

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT				
14...	1100	132	6	2.1
NOV				
14...	1140	93	8	2.0
DEC				
19...	1300	610	12	20
JAN				
19...	1030	E170	16	7.3
FEB				
16...	1507	1150	12	37
MAR				
23...	--	1180	21	67
APR				
13...	0930	2250	264	1600
MAY				
30...	1130	6060	162	2650
JUN				
20...	1330	7300	98	1930
JUL				
18...	1500	2220	26	156
AUG				
16...	1240	715	11	21
SEP				
14...	1135	150	5	2.0

E ESTIMATED.

09244410 YAMPA RIVER BELOW DIVERSION, NEAR HAYDEN, CO--Continued

PHYTOPLANKTON DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	OCT 14,77
TIME	1200
TOTAL CELLS/ML	1700
DIVERSITY: DIVISION	1.1
.CLASS	1.1
..ORDER	1.9
...FAMILY	3.0
....GENUS	3.2

ORGANISM	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)		
.CHLOROPHYCEAE		
..CHLOROCOCCALES		
...OOCYSTACEAE		
....ANKISTRODESMUS	13	1
....CHLORELLA	13	1
...SCENEDESMACEAE		
....SCENEDESMUS	340#	20
..VOLVOCALES		
...CHLAMYDOMONADACEAE		
....CHLAMYDOMONAS	39	2
..ZYGNEMATALES		
...ZYGNEMATACEAE		
....MOUGEOTIA	13	1
CHRYSOPHYTA		
.BACILLARIOPHYCEAE		
..CENTRALES		
...COSCINODISCACEAE		
....CYCLOTELLA	390#	23
..PENNALES		
...ACHNANTHACEAE		
....COCCONEIS	13	1
....RHOICOSPHENIA	13	1
...CYMBELLACEAE		
....EPITHEMIA	260#	15
...DIATOMACEAE		
....DIATOMA	26	2
...FRAGILARIACEAE		
....FRAGILARIA	26	2
....SYNEDRA	160	9
...GOMPHONEMATACEAE		
....GOMPHONEMA	26	2
...NAVICULACEAE		
....NAVICULA	210	12
....NEIDIUM	13	1
...NITZSCHIACEAE		
....NITZSCHIA	65	4
CYANOPHYTA (BLUE-GREEN ALGAE)		
.CYANOPHYCEAE		
..CHROOCOCCALES		
...CHROOCOCCACEAE		
....ANACYSTIS	91	5

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

09244470 STOKES GULCH NEAR HAYDEN, CO

LOCATION.--Lat 40°26'06", long 107°14'47", in NW¼NE¼ sec.22, T.6 N., R.88 W., Routt County, Hydrologic Unit 14050001, on right bank at Routt County Highway 53 crossing and 2 mi (3.2 km) south of Hayden.

DRAINAGE AREA.--13.6 mi² (35.2 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1976 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,375 ft (1,943 m), from topographic map.

REMARKS.--Records good except for March 27-30 which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 189 ft³/s (5.35 m³/s), Apr. 6, 1978, gage height, 5.27 ft (1.606 m); no flow most of each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 189 ft³/s (5.35 m³/s) at 1500 Apr. 6, 1978, gage height, 5.27 ft (1.606 m); no flow for most of year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	78	.30	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	86	.28	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	74	.26	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	62	.26	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	55	.33	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	73	.63	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	81	1.3	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	51	2.5	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	27	1.9	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	13	1.3	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	13	.87	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	7.5	.66	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	4.4	.54	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	6.8	.42	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	3.3	.33	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	2.2	.26	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	2.1	.20	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	1.6	.28	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.97	.26	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.74	.20	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.60	.22	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.66	.33	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.60	.24	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.44	.14	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.30	.08	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.22	.05	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.05	.22	.04	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.50	.24	.03	.00	.00	.00	.00
29	.00	.00	.00	.00	---	.70	.24	.01	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.97	.30	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	24	---	.00	---	.00	.00	---
TOTAL	.00	.00	.00	.00	.00	26.22	646.43	14.22	.00	.00	.00	.00
MEAN	.000	.000	.000	.000	.000	.85	21.5	.46	.000	.000	.000	.000
MAX	.00	.00	.00	.00	.00	24	86	2.5	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.22	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	.00	52	1280	28	.00	.00	.00	.00

CAL YR 1977 TOTAL 0.00 MEAN .000 MAX .00 MIN .00 AC-FT .00
WTR YR 1978 TOTAL 686.87 MEAN 1.88 MAX 86 MIN .00 AC-FT 1360

09244470 STOKES GULCH NEAR HAYDEN, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1976 to current year.

INSTRUMENTATION.--Water-quality monitor since October 1976. Pumping-sediment sampler since October 1976.

REMARKS.--Flow occurred only on days shown.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 10,100 micromhos May 24; minimum, 514 micromhos Apr. 7.
WATER TEMPERATURES: Maximum, 26.0°C May 15; minimum, not determined.
SEDIMENT CONCENTRATIONS: Maximum daily, 902 mg/L Apr. 7; no flow many days during year.
SEDIMENT LOADS: Maximum daily, 249 tons (226 t) Apr. 7; no flow many days during year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)
MAR 30...	1200	.56	6000	7.0	4.5	2100	1900	65	470
APR 18...	1600	1.7	5500	8.3	11.5	--	--	--	--

DATE	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
MAR 30...	930	8.8	6.2	230	0	190	3600	92	.3
APR 18...	--	--	--	340	0	280	2700	92	.3

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	BORON, DISSOLVED (UG/L AS B)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)
MAR 30...	6.1	5320	8.04	8.8	.14	380	60	50
APR 18...	11	--	--	11	.07	280	--	--

DATE	TIME	ANTIMONY, DISSOLVED (UG/L AS SB)	ARSENIC DISSOLVED (UG/L AS AS)	CADMIUM DISSOLVED (UG/L AS CD)	COPPER, DISSOLVED (UG/L AS CU)	LEAD, DISSOLVED (UG/L AS PB)	MERCURY DISSOLVED (UG/L AS HG)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	ZINC, DISSOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)
MAR 30...	1200	1	2	1	7	3	.0	2	60	20	14

09244470 STOKES GULCH NEAR HAYDEN, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							---	7390				
2							---	7460				
3							---	8350				
4							1590	9050				
5							1660	8890				
6							1670	8730				
7							767	8820				
8							850	8960				
9							1430	8640				
10							2160	6970				
11							2050	6880				
12							1990	8290				
13							---	7460				
14							---	8110				
15							3890	8350				
16							4580	8610				
17							4870	9840				
18							5360	9700				
19							5700	8550				
20							6060	6760				
21							6480	7870				
22							6850	9310				
23							7230	9070				
24							7550	9230				
25							6980	7840				
26							6610	---				
27							7100	---				
28							7390	---				
29							7250	---				
30							7270	---				
31							---	---				

09244470 STOKES GULCH NEAR HAYDEN, CO--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	18.5	8.5								
2	---	---	22.0	9.0								
3	---	---	19.5	11.5								
4	7.5	5.5	13.5	9.0								
5	5.5	2.5	15.0	6.5								
6	10.0	3.0	12.5	6.5								
7	13.0	3.5	11.5	7.0								
8	14.0	5.5	12.5	5.5								
9	10.0	6.0	18.5	7.0								
10	10.5	4.0	19.5	10.0								
11	14.0	7.0	15.0	10.5								
12	14.0	7.0	18.5	8.0								
13	---	---	23.5	8.5								
14	---	---	24.5	11.0								
15	13.5	9.0	26.0	13.0								
16	16.0	7.5	24.0	14.0								
17	9.5	5.0	15.5	9.5								
18	10.5	3.0	16.5	8.5								
19	15.0	5.0	23.5	8.5								
20	17.0	8.0	24.0	11.5								
21	10.5	6.0	20.0	15.0								
22	11.5	4.0	23.0	11.5								
23	13.5	5.5	21.0	11.5								
24	18.5	6.5	22.0	12.5								
25	18.5	10.5	20.0	11.5								
26	18.0	9.0	22.0	10.0								
27	14.0	9.5	---	---								
28	14.0	8.5	---	---								
29	19.5	8.5	---	---								
30	17.0	9.5	---	---								
31	---	---	---	---								

09244470 STOKES GULCH NEAR HAYDEN, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		MARCH			APRIL			MAY	
1	.00	---	---	78	356	79	.30	---	.03
2	.00	---	---	86	544	180	.28	---	.02
3	.00	---	---	74	497	107	.26	---	.02
4	.00	---	---	62	392	82	.26	---	.01
5	.00	---	---	55	379	59	.33	---	.01
6	.00	---	---	73	626	190	.63	---	.04
7	.00	---	---	81	902	249	1.3	---	.13
8	.00	---	---	51	648	97	2.5	45	.30
9	.00	---	---	27	291	23	1.9	48	.25
10	.00	---	---	13	160	5.6	1.3	56	.20
11	.00	---	---	13	246	9.7	.87	47	.12
12	.00	---	---	7.5	485	11	.66	60	.11
13	.00	---	---	4.4	74	1.0	.54	59	.09
14	.00	---	---	6.8	143	3.7	.42	71	.09
15	.00	---	---	3.3	83	.78	.33	50	.05
16	.00	---	---	2.2	68	.42	.26	61	.04
17	.00	---	---	2.1	55	.32	.20	111	.08
18	.00	---	---	1.6	46	.22	.28	81	.07
19	.00	---	---	.97	---	.10	.26	55	.05
20	.00	---	---	.74	72	.14	.20	54	.04
21	.00	---	---	.60	33	.05	.22	49	.03
22	.00	---	---	.66	---	.07	.33	63	.07
23	.00	---	---	.60	---	.08	.24	---	.03
24	.00	---	---	.44	---	.05	.14	---	.02
25	.00	---	---	.30	---	.03	.08	---	.01
26	.00	---	---	.22	---	.02	.05	---	.00
27	.05	---	.00	.22	---	.02	.04	---	.00
28	.50	---	.03	.24	---	.02	.03	---	.00
29	.70	---	.08	.24	---	.02	.01	---	.00
30	.97	50	.17	.30	---	.04	.00	---	.00
31	24	240	29	---	---	---	.00	---	.00
TOTAL	26.22	---	29.28	646.43	---	1099.38	14.22	---	1.91
YEAR	686.87		1130.57						

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
APR					
04...	1435	49	221	29	91
04...	1600	61	278	46	91
07...	1730	108	871	254	97
09...	1735	28	197	15	96

09245000 ELKHEAD CREEK NEAR ELKHEAD, COLO.

LOCATION.--Lat 40°40'11", long 107°17'04", in NW¼NE¼ sec.8, T.8 N., R.88 W., Routt County, Hydrologic Unit 14050001, on right bank 0.2 mi (0.3 km) upstream from North Fork Elkhead Creek, 4.5 mi (7.2 km) northwest of Elkhead, and 12 mi (19 km) north of Hayden.

DRAINAGE AREA.--64.2 mi^2 (166.3 km^2).

PERIOD OF RECORD.--January to November 1910 and May to November 1920 (monthly discharge only, published in WSP 1313; published as "at Hayes Ranch"), April 1953 to current year.

REVISED RECORDS.--WSP 1733: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 6,845 ft (2,086 m), from topographic map. Prior to Nov. 30, 1920, nonrecording gage or water-stage recorder 675 ft (210 m) upstream at different datum.

REMARKS.--Records good except those for winter period, which are poor. No diversion above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--25 years (water years 1954-78), 52.6 ft^3/s (1.490 m^3/s), 38,110 acre-ft/yr (47.0 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 1,660 ft^3/s (47.0 m^3/s) May 22, 1920; no flow Sept. 1, 1954, Sept. 12-19, 24, 1955, Aug. 27-29, 1961, Aug. 14-19, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,870 ft^3/s (53.0 m^3/s) at 0100 May 17, gage height, 7.07 ft (2.155 m), only peak above base of 800 ft^3/s (23 m^3/s); minimum daily, 1.3 ft^3/s (0.037 m^3/s), Oct. 13, Nov. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	2.0	3.2	3.0	4.0	5.4	36	318	502	63	8.6	2.9
2	1.9	1.8	3.2	3.2	4.0	5.8	18	389	486	52	9.1	2.8
3	1.7	1.9	3.2	3.5	4.0	6.6	10	440	494	44	8.6	2.7
4	1.5	1.9	3.2	3.4	4.0	6.6	20	361	486	39	8.1	2.6
5	1.6	1.8	3.2	3.4	4.0	6.6	22	255	428	34	7.5	2.4
6	2.0	1.9	3.2	3.4	4.1	7.3	26	201	385	31	6.8	2.2
7	3.2	2.0	3.0	3.3	4.1	8.0	28	154	392	25	6.4	2.1
8	2.8	1.8	3.0	3.3	4.2	7.8	32	131	361	15	6.1	2.3
9	1.9	1.4	3.0	3.2	4.2	7.6	40	124	358	13	5.9	3.1
10	1.6	1.4	3.0	3.2	4.3	7.4	48	195	375	13	5.5	3.3
11	1.5	1.3	3.0	3.2	4.3	7.2	47	263	361	13	5.5	3.1
12	1.4	1.5	3.0	3.2	4.4	6.9	58	308	312	22	5.5	3.6
13	1.3	1.5	3.0	3.2	4.4	7.0	61	399	293	18	5.3	3.8
14	1.4	1.6	3.0	3.2	4.4	6.8	54	741	290	14	5.8	3.5
15	1.4	1.9	3.0	3.2	4.5	6.6	62	1100	270	14	7.9	3.3
16	1.4	1.7	3.0	3.2	4.6	6.7	63	1290	256	13	8.1	3.2
17	1.4	1.7	3.0	3.2	4.6	7.0	69	1090	227	13	6.8	2.9
18	1.4	1.9	3.0	3.3	4.6	8.0	58	548	197	13	5.8	2.8
19	1.4	2.0	3.0	3.4	4.6	9.0	63	531	176	13	5.7	3.3
20	1.4	2.0	3.1	3.4	4.7	10	72	725	159	13	5.7	3.7
21	1.5	3.1	3.1	3.5	5.0	14	112	793	142	12	5.4	3.9
22	1.6	3.6	3.1	3.5	5.0	16	93	914	131	12	5.2	3.5
23	1.7	3.4	3.1	3.5	5.1	18	71	1020	119	11	4.8	3.5
24	1.7	3.5	3.1	3.6	5.3	19	71	1000	110	10	4.5	3.4
25	1.7	3.6	3.0	3.6	5.8	20	149	847	103	9.4	4.3	3.2
26	1.7	3.8	2.8	3.6	6.0	21	239	706	92	8.8	4.1	3.0
27	1.6	3.6	2.9	3.7	6.6	22	290	652	80	8.3	3.8	2.8
28	1.6	3.3	3.0	3.8	5.8	69	252	592	71	7.6	3.6	2.7
29	1.6	3.4	3.0	3.9	---	114	247	620	67	7.3	3.5	2.7
30	2.1	3.2	3.0	4.0	---	114	305	652	72	8.8	3.3	2.6
31	2.5	---	3.0	4.0	---	66	---	553	---	9.2	3.1	---
TOTAL	53.1	69.5	94.4	106.1	130.6	637.3	2716	17912	7795	579.4	180.3	90.9
MEAN	1.71	2.32	3.05	3.42	4.66	20.6	90.5	578	260	18.7	5.82	3.03
MAX	3.2	3.8	3.2	4.0	6.6	114	305	1290	502	63	9.1	3.9
MIN	1.3	1.3	2.8	3.0	4.0	5.4	10	124	67	7.3	3.1	2.1
AC-FT	105	138	187	210	259	1260	5390	35530	15460	1150	358	180

CAL YR 1977 TOTAL 5952.53 MEAN 16.3 MAX 262 MIN .00 AC-FT 11810
WTR YR 1978 TOTAL 30364.60 MEAN 83.2 MAX 1290 MIN 1.3 AC-FT 60230

09246550 YAMPA RIVER BELOW ELKHEAD CREEK, NEAR CRAIG, CO

LOCATION.--Lat 40°29'50", long 107°30'34", in NW¼NE¼ sec.8,T.6 N., R.90 W., Moffat County, Hydrologic Unit 14050001, 350 ft (107 m) northeast of Craig airport runway, 2.3 mi (3.6 km) east of old State Highways 789 and 394 junction south of Craig, and about 1.5 mi (2.4 km) upstream from mouth of Fortification Creek.

PERIOD OF RECORD.--June 1975 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
OCT											
14...	0930	E215	270	7.4	6.5	8.0	2.6	110	15	29	10
NOV											
14...	0930	E150	380	7.7	2.0	10.2	--	130	6	32	12
DEC											
19...	0930	E100	340	7.9	.0	10.4	--	130	18	35	11
JAN											
19...	1200	190	280	8.1	1.0	11.7	--	130	33	31	13
FEB											
16...	1155	E200	310	7.4	1.0	11.1	--	130	18	35	11
MAR											
23...	1040	E640	407	8.2	2.5	--	--	150	45	36	15
APR											
13...	1225	E3560	360	7.5	6.5	10.1	--	130	52	34	12
MAY											
16...	1330	E8600	185	7.8	11.0	8.3	--	73	14	19	6.3
JUL											
19...	1120	2500	107	7.3	17.0	7.5	--	40	2	11	3.1
AUG											
10...	0930	E476	200	7.7	19.0	6.9	--	80	7	21	6.6
SEP											
14...	1330	E153	325	8.1	13.5	8.1	--	120	12	31	10

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
OCT											
14...	19	.8	2.2	120	0	98	38	9.6	.2	6.3	174
NOV											
14...	25	1.0	2.5	150	0	120	48	13	.2	8.6	215
DEC											
19...	24	.9	2.4	140	0	110	46	10	.2	7.1	205
JAN											
19...	22	.8	2.2	120	0	98	44	10	.3	11	193
FEB											
16...	23	.9	2.3	140	0	110	46	11	.2	11	209
MAR											
23...	29	1.0	2.3	130	0	110	82	12	.2	9.6	250
APR											
13...	16	.6	2.9	100	0	82	76	4.1	.1	9.9	204
MAY											
16...	6.6	.3	2.1	73	0	60	26	2.1	.1	9.7	108
JUL											
19...	4.1	.3	.9	47	0	39	11	1.5	.1	7.6	63
AUG											
10...	9.8	.5	1.4	89	0	73	23	3.3	.1	8.0	117
SEP											
14...	19	.8	2.5	130	0	110	41	9.6	.2	--	179

E ESTIMATED.

09246550 YAMPA RIVER BELOW ELKHEAD CREEK, NEAR CRAIG, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)	PHYTO-PLANK-TON, TOTAL (CELLS PER ML)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)
OCT											
14...	.01	.00	1.1	1.1	1.1	.01	60	110	900	--	--
NOV											
14...	.01	.03	.42	.45	.46	.06	70	60	--	3.3	3.6
DEC											
19...	.02	.01	.33	.34	.36	.01	60	210	--	3.3	3.3
JAN											
19...	.20	.02	.55	.57	.77	.06	50	--	--	3.9	2.9
FEB											
16...	.22	.10	.27	.37	.59	.06	50	250	--	4.3	4.1
MAR											
23...	.52	.08	.54	.62	1.1	.17	60	100	--	5.1	6.6
APR											
13...	.94	.06	1.0	1.1	2.0	.30	90	40	--	15	6.6
MAY											
16...	.17	.05	1.2	1.2	1.4	.34	90	80	--	18	7.2
JUL											
19...	.02	.00	.74	.74	.76	.04	30	120	--	5.2	5.6
AUG											
10...	.02	.02	.43	.45	.47	.02	40	40	--	3.7	4.1
SEP											
14...	.02	.01	1.1	1.1	1.1	.02	60	70	--	4.4	3.8

DATE	TIME	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)
MAY									
16...	1330	--	30	2	1	5	0	3	ND
SEP									
14...	1330	70	20	1	1	0	0	0	0

DATE	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)
MAY									
16...	10	0	20	1	27	22	360	40	.0
SEP									
14...	10	0	4	2	4	0	20	0	.0

DATE	MERCURY DIS-SOLVED (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
MAY								
16...	.0	11	1	1	0	1.0	50	0
SEP								
14...	.0	1	1	0	0	.0	10	10

09246550 YAMPA RIVER BELOW ELKHEAD CREEK, NEAR CRAIG, CO--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
JAN				
19...	1200	190	9	4.6
FEB				
16...	1155	E200	7	3.8
MAR				
23...	1040	E640	38	41

E ESTIMATED.

09246550 YAMPA RIVER BELOW ELKHEAD CREEK, NEAR CRAIG, CO--Continued

PHYTOPLANKTON DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	OCT 14,77
TIME	0930
TOTAL CELLS/ML	900
DIVERSITY: DIVISION	1.2
.CLASS	1.3
..ORDER	2.0
...FAMILY	3.5
....GENUS	3.6

ORGANISM	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)		
.CHLOROPHYCEAE		
..CHLOROCOCCALES		
...OOCYSTACEAE		
....ANKISTRODESMUS	45	5
....CHLORELLA	36	4
...SCENEDESMACEAE		
....SCENEDESMUS	130	14
..VOLVOCALES		
...CHLAMYDOMONADACEAE		
....CHLAMYDOMONAS	36	4
..ZYGNEMATALES		
...MESOTAENIACEAE		
....NETRIUM	9	1
CHRYSOPHYTA		
.BACILLARIOPHYCEAE		
..CENTRALES		
...COSCINODISCACEAE		
....CYCLOTELLA	99	11
....THALASSIOSIRA	18	2
..PENNALES		
...ACHNANTHACEAE		
....COCCONEIS	36	4
...CYMBELLACEAE		
....EPITHEMIA	140#	16
...DIATOMACEAE		
....DIATOMA	9	1
...FRAGILARIACEAE		
....SYNEDRA	63	7
...NAVICULACEAE		
....NAVICULA	99	11
...NITZSCHIACEAE		
....NITZSCHIA	110	12
...SURIRELLACEAE		
....CYMATOPLEURA	9	1
.CHRYSOPHYCEAE		
..CHRYSOMONADALES		
...CHROMULINACEAE		
....CHRYSOCOCCUS	18	2
CYANOPHYTA (BLUE-GREEN ALGAE)		
.CYANOPHYCEAE		
..HORMOGONALES		
...OSCILLATORIACEAE		
....SCHIZOTHRIX	9	1
EUGLENOPHYTA (EUGLENOIDS)		
.EUGLENOPHYCEAE		
..EUGLENALES		
...EUGLENACEAE		
....TRACHELOMONAS	18	2
PYRRHOPHYTA (FIRE ALGAE)		
.DINOPHYCEAE		
..GYMNODINIALES		
...GYMNODINIACEAE		
....GYMNODINIUM	18	2

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

09247600 YAMPA RIVER BELOW CRAIG, CO

LOCATION.--Lat 40°29'04", long 107°36'23", in SW¼SE¼ sec.9, T.6 N., R.91 W., Moffat County, Hydrologic Unit 14050001, at State Highways 13 and 789 bridge about 0.5 mi (0.8 km) above the mouth of Johnson Gulch and about 3 mi (4.8 km) southwest of Craig.

PERIOD OF RECORD.--June 1975 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
OCT											
12...	0930	E210	280	7.6	4.5	10.4	100	5	27	8.8	19
NOV											
18...	0845	151	320	7.1	3.5	10.2	130	9	33	12	26
DEC											
23...	0945	100	415	7.8	1.0	10.5	140	12	36	13	34
JAN											
19...	1400	201	320	8.1	1.0	10.8	120	14	32	10	27
FEB											
16...	1115	280	340	7.6	1.5	10.8	130	13	33	11	28
MAR											
23...	1130	630	420	8.2	3.5	--	160	46	38	16	35
APR											
13...	1315	3540	350	7.5	7.5	9.8	130	50	33	12	16
MAY											
18...	1345	8800	170	7.8	6.5	9.4	65	11	17	5.4	5.8
JUN											
07...	1300	6550	110	8.8	11.5	8.7	46	10	12	3.9	4.0
20...	1500	8000	80	7.4	13.0	10.4	37	11	11	2.3	2.6
JUL											
17...	1045	2620	80	7.2	16.0	8.0	37	5	10	3.0	4.3
AUG											
10...	1500	476	210	8.6	23.5	10.0	80	6	21	6.7	11
SEP											
14...	1510	158	325	8.8	16.0	12.2	120	14	31	11	22

DATE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)
OCT											
12...	.8	2.8	120	0	98	37	9.8	.2	6.4	170	.03
NOV											
18...	1.0	2.3	150	0	120	46	15	.2	5.1	214	.02
DEC											
23...	1.2	2.8	160	0	130	70	14	.3	8.5	258	.09
JAN											
19...	1.1	2.4	130	0	110	43	11	.2	9.6	199	.29
FEB											
16...	1.1	2.3	140	0	110	49	10	.3	10	213	.22
MAR											
23...	1.2	3.1	140	0	110	91	14	.2	9.1	276	.41
APR											
13...	.6	2.8	100	0	82	72	4.1	.1	9.4	199	.94
MAY											
18...	.3	1.5	65	0	53	22	1.9	.1	9.6	96	.10
JUN											
07...	.3	.8	44	0	36	12	.9	.1	9.0	65	.04
20...	.2	.7	32	0	26	6.5	.9	.1	7.5	48	.02
JUL											
17...	.3	.8	39	0	32	10	1.5	.1	6.8	56	.02
AUG											
10...	.5	1.5	80	5	74	29	5.3	.1	7.3	126	.05
SEP											
14...	.9	2.4	110	11	110	46	11	.2	--	190	.02

E ESTIMATED.

09247600 YAMPA RIVER BELOW CRAIG, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)	PHYTO-PLANK-TON, TOTAL (CELLS PER ML)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)
OCT										
12...	.09	.59	.68	.71	.09	90	80	2200	--	--
NOV										
18...	.07	.47	.54	.59	.07	70	180	--	3.1	3.4
DEC										
23...	.42	.44	.86	.95	.12	70	40	--	4.2	8.2
JAN										
19...	.27	.53	.80	1.1	.12	70	80	--	2.8	3.0
FEB										
16...	.25	.35	.60	.82	.12	60	90	--	4.8	4.5
MAR										
23...	.10	.50	.60	1.0	.21	60	--	--	6.4	9.7
APR										
13...	.06	.91	.97	1.9	.27	50	40	--	13	6.7
MAY										
18...	.10	.79	.89	.99	.24	30	120	--	9.9	7.0
JUN										
07...	.00	.40	.40	.44	.08	40	160	--	6.2	5.1
20...	.01	.29	.30	.32	.05	20	--	--	5.7	5.4
JUL										
17...	.00	.34	.34	.36	.06	30	70	--	5.1	4.5
AUG										
10...	.02	.33	.35	.40	.04	40	20	--	4.0	4.2
SEP										
14...	.09	.66	.75	.77	.08	60	40	--	4.5	4.7

DATE	TIME	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)
MAY									
18...	1345	--	80	2	1	0	0	3	1
SEP									
14...	1510	80	50	2	1	0	0	0	0

DATE	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)
MAY									
18...	15	0	8	1	20	12	140	20	.0
SEP									
14...	20	0	5	1	2	0	20	0	.0

DATE	MERCURY DIS-SOLVED (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
MAY								
18...	.0	7	1	0	0	1.0	30	0
SEP								
14...	.0	0	0	0	0	.0	10	0

09247600 YAMPA RIVER BELOW CRAIG, CO--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT				
12...	0930	E210	10	5.7
NOV				
18...	0915	151	6	2.4
DEC				
23...	0915	100	5	1.6
JAN				
19...	1400	201	10	5.4
FEB				
16...	1115	200	5	2.7
MAR				
23...	1140	970	64	168
JUN				
07...	1330	6550	162	2860
AUG				
10...	1430	476	10	13
SEP				
14...	1530	158	3	1.3

09247600 YAMPA RIVER BELOW CRAIG, CO--Continued

PHYTOPLANKTON DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	OCT 12,77
TIME	0930
TOTAL CELLS/ML	2200
DIVERSITY: DIVISION	1.2
.CLASS	1.3
..ORDER	1.7
...FAMILY	3.0
....GENUS	0.0

ORGANISM	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)		
.CHLOROPHYCEAE		
..CHLOROCOCCALES		
...MICRACTINIACEAE		
....GOLENKINIA	14	1
...OOCYSTACEAE		
....ANKISTRODESMUS	150	7
....CHLORELLA	140	6
....OOCYSTIS	84	4
...SCENEDESMACEAE		
....SCENEDESMUS	830#	38
..VOLVOCALES		
...CHLAMYDOMONADACEAE		
....CHLAMYDOMONAS	28	1
..ZYGNEMATALES		
...DESMIDIACEAE		
....CLOSTERIUM	14	1
...ZYGNEMATACEAE		
....MOUGEOTIA	28	1
CHRYSOPHYTA		
.BACILLARIOPHYCEAE		
..CENTRALES		
...BIDDULPHIACEAE	14	1
...COSCINODISCACEAE		
....CYCLOTELLA	84	4
..PENNALES		
...CYMBELLACEAE		
....CYMBELLA	14	1
....EPITHEMIA	28	1
...DIATOMACEAE		
....DIATOMA	110	5
...FRAGILARIACEAE		
....SYNEDRA	14	1
...GOMPHONEMATACEAE		
....GOMPHONEMA	42	2
...NAVICULACEAE		
....NAVICULA	140	6
...NITZSCHIACEAE		
....NITZSCHIA	250	12
.CHRYSOPHYCEAE		
..CHRYSOMONADALES		
...CHROMULINACEAE		
....CHROMULINA	14	1
....CHRYSOCOCCUS	14	1
CYANOPHYTA (BLUE-GREEN ALGAE)		
.CYANOPHYCEAE		
..HORMOGONALES		
...NOSTOCACEAE		
....ANABAENA	42	2
...OSCILLATORIACEAE		
....SCHIZOTHRIX	110	5

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

09249200 SOUTH FORK OF WILLIAMS FORK NEAR PAGODA, CO

LOCATION.--Lat 40°12'44", long 107°26'32", in NE¼SE¼ sec.24, T.3 N., R.90 W., Rio Blanco County, Hydrologic unit 14050001, on left bank at downstream side of private bridge, 1.3 mi (2.1 km) upstream from Pine Creek, and 11 mi (18 km) south of Pagoda.

DRAINAGE AREA.--46.7 mi² (121.0 km²).

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 7,235 ft (2,205 m), from topographic map.

REMARKS.--Records fair except those for period of no gage-height record, which are poor. Diversions above station for irrigation of about 100 acres (405,000 m²) above and 50 acres (202,000 m²) below station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--13 years, 42.0 ft³/s (1.189 m³/s), 30,430 acre-ft/yr (37.5 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 910 ft³/s (25.8 m³/s) May 9, 1974, gage height, 3.97 ft (1.210 m), from rating curve extended above 420 ft³/s (12 m³/s); no flow July 31, Aug. 31, Sept. 1, 7, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge unknown; minimum daily 0.94 ft³/s (0.027 m³/s) on Sept. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	3.6	3.0	4.5	4.9	4.9	24	61	590	120	5.1	1.6
2	2.1	4.1	3.0	4.5	4.8	5.0	22	69	570	104	4.8	1.4
3	2.1	3.7	3.3	4.5	4.8	5.2	19	83	550	88	4.2	1.5
4	1.9	3.4	3.3	4.6	4.8	5.4	18	71	530	72	4.3	1.4
5	3.0	3.5	3.3	4.6	4.8	5.6	17	57	510	59	4.3	1.1
6	6.3	3.5	3.2	4.6	4.8	5.8	17	51	490	49	3.7	.94
7	11	3.8	3.2	4.6	4.8	6.0	20	39	470	44	3.4	1.4
8	5.7	2.7	3.2	4.6	4.8	6.0	25	32	450	42	3.4	2.7
9	3.6	2.3	3.2	4.6	4.8	6.0	25	36	430	42	3.8	1.9
10	3.1	5.1	3.0	4.6	4.8	6.0	20	48	410	40	3.4	1.4
11	2.6	4.7	2.9	4.7	4.7	6.0	20	59	390	40	3.1	2.6
12	3.1	3.2	3.1	4.7	4.7	6.0	26	61	370	33	3.1	3.9
13	2.8	4.4	3.0	4.7	4.7	6.0	26	81	350	22	4.9	2.8
14	2.6	3.5	3.1	4.7	4.7	6.0	27	100	340	17	6.8	2.4
15	2.5	2.7	3.2	4.7	4.7	6.0	32	150	337	15	9.2	2.1
16	2.3	2.8	3.4	4.7	4.7	6.0	34	170	335	14	6.5	1.9
17	2.3	2.8	6.1	4.7	4.7	6.0	31	190	330	22	4.1	3.0
18	2.1	2.9	3.4	4.7	4.7	6.0	30	220	276	20	3.9	5.0
19	2.1	3.0	3.3	4.7	4.7	6.0	28	250	262	14	4.4	4.9
20	2.1	3.1	3.3	4.7	4.7	6.0	32	300	235	13	3.7	4.6
21	2.9	3.2	3.3	4.8	4.8	6.0	38	360	260	10	3.6	3.5
22	3.5	3.2	3.3	4.8	4.8	6.0	34	390	229	8.6	4.1	5.1
23	2.7	3.3	3.3	4.8	4.8	6.0	29	400	225	6.4	3.4	5.1
24	2.4	3.3	3.4	4.8	4.8	6.0	33	440	217	6.1	2.7	4.0
25	2.4	3.3	4.0	4.9	4.9	6.0	43	480	187	6.2	2.4	3.5
26	2.3	3.2	4.1	4.9	4.9	9.0	62	490	180	6.1	2.1	2.9
27	2.2	3.3	4.2	4.9	4.9	11	67	500	160	5.6	1.8	2.6
28	2.2	3.1	4.4	4.9	4.9	14	56	520	150	5.3	1.6	2.4
29	2.2	3.2	4.4	4.9	---	18	55	530	150	6.2	1.7	2.4
30	4.2	3.0	4.4	4.9	---	20	60	550	143	5.9	1.7	2.4
31	3.8	---	4.4	4.9	---	24	---	580	---	5.1	1.4	---
TOTAL	96.4	100.9	109.7	146.2	133.9	241.9	970	7368	10126	941.5	116.6	82.44
MEAN	3.11	3.36	3.54	4.72	4.78	7.80	32.3	238	338	30.4	3.76	2.75
MAX	11	5.1	6.1	4.9	4.9	24	67	580	590	120	9.2	5.1
MIN	1.9	2.3	2.9	4.5	4.7	4.9	17	32	143	5.1	1.4	.94
AC-FT	191	200	218	290	266	480	1920	14610	20080	1870	231	164

CAL YR 1977 TOTAL 3307.09 MEAN 9.06 MAX 113 MIN .00 AC-FT 6560
WTR YR 1978 TOTAL 20433.54 MEAN 56.0 MAX 590 MIN .94 AC-FT 40530

NOTE.--NO GAGE-HEIGHT RECORD DEC. 24 TO MAR. 27, MAY 13 TO JUNE 16, JUNE 20, 25, 26, 28, 29, AUG. 14.

09249750 WILLIAMS FORK RIVER AT MOUTH, NEAR HAMILTON, CO

LOCATION.--Lat 40°26'14", long 107°38'50", in SE¼NW¼ sec.31, T.6 N., R.91 W., Moffat County, Hydrologic Unit 14050001, at Coal Mine Road crossing about 1,500 ft (457 m) upstream from confluence with Yampa River and about 8 mi (12.9 km) south-southwest of Craig.

PERIOD OF RECORD.--June 1975 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
OCT 12...	1015	24	410	8.0	3.0	11.0	200	21	46	21	18
NOV 18...	0945	E50	420	8.0	2.0	10.6	210	25	46	22	20
DEC 23...	1015	29	490	8.0	1.0	10.5	280	71	61	30	27
JAN 19...	1430	34	430	8.1	1.0	--	220	43	50	24	19
FEB 16...	0930	35	460	7.9	1.5	10.8	250	66	56	26	21
MAR 23...	1245	91	550	8.5	5.5	--	260	76	58	29	24
APR 14...	1345	199	440	8.1	10.0	9.1	210	55	50	21	14
MAY 30...	1600	1230	200	8.1	9.5	9.3	98	20	26	8.0	4.3
JUN 21...	1200	900	128	7.1	12.0	11.0	74	7	20	5.9	3.4
JUL 17...	1450	272	245	8.2	21.0	7.3	120	21	28	12	6.0
AUG 09...	1420	72	300	8.7	24.5	--	140	12	33	14	9.7
SEP 25...	1300	47	400	8.2	15.5	8.9	190	30	43	19	14

DATE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)
OCT 12...	.6	2.2	220	0	180	53	3.6	.2	12	265	.03
NOV 18...	.6	1.5	220	0	180	62	4.3	.2	11	276	.01
DEC 23...	.7	2.3	250	0	210	110	7.3	.2	15	376	.05
JAN 19...	.6	1.7	220	0	180	70	5.4	.2	13	292	.10
FEB 16...	.6	1.8	220	0	180	88	5.8	.2	14	321	.06
MAR 23...	.6	2.1	230	0	190	110	6.5	.2	9.9	353	.05
APR 14...	.4	2.0	190	0	160	78	3.5	.1	11	273	.22
MAY 30...	.2	1.1	95	0	78	18	1.4	.1	9.7	116	.07
JUN 21...	.2	.7	82	0	67	14	.5	.1	11	96	.03
JUL 17...	.2	1.2	120	0	98	23	1.2	.1	13	144	.04
AUG 09...	.4	1.3	140	8	130	28	1.4	.1	12	177	.04
SEP 25...	.4	1.6	190	0	160	57	2.7	.1	11	242	.01

E ESTIMATED.

09249750 WILLIAMS FORK AT MOUTH, NEAR HAMILTON, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)	PHYTO-PLANK-TON, TOTAL (CELLS PER ML)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)
OCT 12...	.10	.25	.35	.38	.03	50	60	300	--	--
NOV 18...	.04	.18	.22	.23	.01	50	50	--	2.9	4.7
DEC 23...	.14	.38	.52	.5[illegible]	.01	40	20	--	3.7	7.7
JAN 19...	.03	.43	.46	.56	.08	40	30	--	7.7	3.0
FEB 16...	.06	.09	.15	.21	.02	40	50	--	4.3	3.8
MAR 23...	.01	1.6	1.6	1.7	.35	50	70	--	45	5.9
APR 14...	.01	.71	.72	.94	.17	40	40	--	--	--
MAY 30...	.01	.89	.90	.97	.02	40	140	--	14	7.3
JUN 21...	.03	.89	.92	.95	.40	30	250	--	12	8.0
JUL 17...	.00	.53	.53	.5[illegible]	.09	30	70	--	5.2	3.7
AUG 09...	.00	.40	.40	.44	.02	40	50	--	5.1	3.4
SEP 25...	.01	.25	.26	.27	.01	60	20	--	3.6	3.6

DATE	TIME	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)
MAY 30...	1600	4800	80	2	1	0	0	1	1
SEP 25...	1300	120	5	1	2	0	0	2	1

DATE	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)
MAY 30...	20	5	18	6	10	6	230	10	.2
SEP 25...	0	0	1	0	11	8	10	10	.0

DATE	MERCURY DIS-SOLVED (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
MAY 30...	.0	18	0	0	0	1.0	60	20
SEP 25...	.0	0	0	0	0	.3	10	0

09249750 WILLIAMS FORK AT MOUTH, NEAR HAMILTON, CO--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
DEC				
08...	1000	34	16	1.5
JAN				
26...	1210	29	5	.39
MAR				
25...	1215	66	80	14
MAY				
13...	1220	190	77	40
SEP				
08...	1100	13	70	2.5

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT				
12...	1030	24	26	1.7
NOV				
18...	1015	50	8	1.1
DEC				
23...	1015	29	27	2.1
JAN				
19...	1515	34	23	2.1
FEB				
16...	1000	35	45	4.3
MAR				
23...	1300	92	509	126
JUL				
17...	1420	272	131	96
AUG				
09...	1300	72	18	3.5
SEP				
25...	1240	47	8	1.0
25...	1245	47	7	.89

09249750 WILLIAMS FORK AT MOUTH, NEAR HAMILTON, CO--Continued

PHYTOPLANKTON DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	OCT 12,77
TIME	1015
TOTAL CELLS/ML	300
DIVERSITY: DIVISION	1.3
.CLASS	1.4
..ORDER	1.8
...FAMILY	3.1
....GENUS	3.2

ORGANISM	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)		
.CHLOROPHYCEAE		
..CHLOROCOCCALES		
...OOCYSTACEAE		
....ANKISTRODESMUS	15	5
...SCENEDESMACEAE		
....SCENEDESMUS	46	15
..ZYGNEMATALES		
...ZYGNEMATACEAE		
....MOUGEOTIA	20	7
CHRYSOPHYTA		
.BACILLARIOPHYCEAE		
..CENTRALES		
...COSCINODISCACEAE		
....CYCLOTELLA	10	3
..PENNALES		
...CYMBELLACEAE		
....EPITHEMIA	10	3
...DIATOMACEAE		
....DIATOMA	10	3
...FRAGILARIACEAE		
....SYNEDRA	25	8
...NAVICULACEAE		
....CALONEIS	5	2
....NAVICULA	25	8
...NITZSCHIACEAE		
....NITZSCHIA	96#	32
...SURIRELLACEAE		
....SURIRELLA	5	2
.CHRYSOPHYCEAE		
..CHRYSOMONADALES		
...CHROMULINACEAE		
....CHRYSOCOCCUS	5	2
CRYPTOPHYTA (CRYPTOMONADS)		
.CRYPTOPHYCEAE		
..CRYPTOMONIDALES		
...CRYPTOMONODACEAE		
....CRYPTOMONAS	5	2
CYANOPHYTA (BLUE-GREEN ALGAE)		
.CYANOPHYCEAE		
..HORMOGONALES		
...OSCILLATORIACEAE		
....SCHIZOTHRIX	25	8

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

09250000 MILK CREEK NEAR THORNBURGH, CO

LOCATION.--Lat 40°11'37", long 107°43'57", in NE¼ sec.32, T.3 N., R.92 W., Rio Blanco County, Hydrologic Unit 14050003, on right bank 2.2 mi (3.5 km) southwest of Thornburgh and 3.0 mi (4.8 km) upstream from Little Creek.

DRAINAGE AREA.--65 mi^2 (168 km^2), approximately.

PERIOD OF RECORD.--October 1952 to current year. Published as "near Thornburg" October 1952 to September 1968.

GAGE.--Water-stage recorder. Datum of gage is 6,599.32 ft (2,011.473 m), National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation).

REMARKS.--Records good except those for period of no gage-height record, which are fair. Diversion for irrigation of about 1,321 acres (535 km^2) above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--26 years, 24.5 ft^3/s (0.694 m^3/s), 17,750 acre-ft/yr (21.9 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,050 ft^3/s (29.7 m^3/s) May 10, 1974, gage height, 5.03 ft (1.533 m), from rating curve extended above 340 ft^3/s (9.6 m^3/s); maximum gage height, 5.52 ft (1.682 m) June 1, 1957; minimum daily discharge, 0.20 ft^3/s (0.006 m^3/s) for several days in 1956, 1963, and 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, about 600 ft^3/s (17.0 m^3/s) May 16, only peak above base of 250 ft^3/s (7.1 m^3/s); minimum daily, 0.30 ft^3/s (0.008 m^3/s) Oct. 1-3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.30	1.3	1.6	1.7	1.8	3.1	49	170	170	28	2.3	.62
2	.30	1.2	1.3	2.2	1.9	4.6	49	180	179	25	2.1	.60
3	.30	1.1	1.4	2.4	1.8	6.5	40	200	177	21	1.7	.58
4	.32	1.1	1.7	2.1	3.3	5.7	35	240	173	18	1.5	.58
5	.34	1.2	1.6	2.0	2.6	5.3	32	270	191	16	1.5	.58
6	.36	1.2	2.0	2.0	1.7	5.6	32	300	167	15	1.4	.56
7	.38	1.2	1.2	2.0	1.8	4.9	27	330	173	12	1.3	.56
8	.35	1.3	1.7	2.0	2.2	4.4	37	390	154	9.8	1.2	.54
9	.35	1.3	1.2	1.9	2.8	5.2	44	450	154	9.6	1.2	.54
10	.35	1.2	1.1	1.8	1.8	6.0	34	500	165	9.5	1.0	.54
11	.66	.95	1.2	1.7	2.0	5.7	30	500	156	9.9	.87	.50
12	.68	1.0	1.3	1.6	2.7	5.6	41	450	119	8.9	.84	.50
13	.65	1.3	1.3	2.4	2.2	5.1	44	400	103	8.4	.80	.50
14	.68	1.2	1.2	1.8	1.7	4.6	47	450	104	6.9	.73	.50
15	.65	1.2	1.4	1.7	2.3	4.5	51	500	95	7.2	.72	.50
16	.63	1.1	1.6	2.7	2.4	4.1	55	540	90	6.7	.70	.50
17	.65	1.0	1.6	1.7	2.0	4.4	57	500	77	6.6	.70	.50
18	.71	1.0	1.7	2.1	1.9	5.4	45	450	65	6.1	.68	.47
19	.67	1.3	1.8	2.3	1.7	8.0	41	400	58	6.2	.68	.47
20	.57	1.5	1.9	1.5	3.3	17	41	360	55	5.9	.66	.46
21	.57	1.2	2.6	1.7	3.1	22	55	300	49	5.2	.66	.47
22	.63	1.3	2.9	2.9	3.3	25	48	270	45	4.6	.66	.47
23	.65	1.4	2.3	1.8	2.9	25	42	250	43	4.4	.64	.47
24	.71	1.3	2.0	2.9	4.1	26	40	250	40	3.7	.64	.46
25	.77	1.4	1.8	1.7	1.9	17	57	260	37	3.4	.62	.46
26	.75	1.8	1.7	2.1	1.9	19	87	218	33	3.0	.62	.46
27	.71	1.7	1.6	2.4	2.3	18	100	231	29	2.8	.60	.45
28	1.7	1.7	1.7	2.4	3.4	21	120	201	29	2.4	.62	.44
29	.90	1.7	1.5	2.3	---	23	130	202	36	2.4	.62	.44
30	.94	1.4	1.5	2.0	---	25	150	213	34	2.3	.62	.44
31	.99	---	2.2	2.1	---	30	---	202	---	2.6	.62	---
TOTAL	19.22	38.55	51.6	63.9	66.8	366.7	1660	10177	3000	273.5	29.50	15.16
MEAN	.62	1.29	1.66	2.06	2.39	11.8	55.3	328	100	8.82	.95	.51
MAX	1.7	1.8	2.9	2.9	4.1	30	150	540	191	28	2.3	.62
MIN	.30	.95	1.1	1.5	1.7	3.1	27	170	29	2.3	.60	.44
AC-FT	38	76	102	127	132	727	3290	20190	5950	542	59	30

CAL YR 1977 TOTAL 1439.76 MEAN 3.94 MAX 41 MIN .21 AC-FT 2860
WTR YR 1978 TOTAL 15761.93 MEAN 43.2 MAX 540 MIN .30 AC-FT 31260

NOTE.--NO GAGE-HEIGHT RECORD APR. 26 TO MAY 25, AUG. 11 TO SEPT. 30.

09250400 GOOD SPRING CREEK AT AXIAL, CO

LOCATION.--Lat 40°17'24", long 107°47'21", in SW¼NE¼ sec.26, T.4 N., R.93 W., Moffatt County, Hydrologic Unit 14050001, on right bank 100 ft (30 m) downstream from crossing of State Highways 13 and 789 and 0.5 mi (0.8 km) north of Axial.

DRAINAGE AREA.--40.0 mi² (104 km²), revised.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1974 to March 31, 1978 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 6,390 ft (1,948 m), from topographic map.

REMARKS.--Records good except those for winter period, which are fair. Diversions above gage for irrigation of about 136 acres (550,000 m²) of hay meadows.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 58 ft³/s (1.64 m³/s) July 21, 1977, gage height, 4.07 ft (1.241 m); no flow Jan. 19-29, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5.9 ft³/s (0.167 m³/s) Oct. 7, gage height, 3.15 ft (0.960 m); minimum daily, 0.01 ft³/s (<0.001 m³/s) Oct. 3-5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.04	.11	.16	.23	.50	1.1						
2	.02	.11	.18	.23	.52	1.1						
3	.01	.11	.16	.24	.58	.87						
4	.01	.11	.14	.24	.64	.90						
5	.01	.11	.12	.24	.56	1.2						
6	.04	.11	.12	.24	.53	.87						
7	.55	.13	.12	.24	.50	.76						
8	.09	.11	.12	.24	.47	.70						
9	.07	.07	.13	.26	.46	.83						
10	.07	.07	.14	.28	.59	.83						
11	.09	.07	.13	.30	.59	.76						
12	.09	.07	.13	.28	.56	.83						
13	.09	.07	.13	.28	.59	.83						
14	.09	.07	.13	.30	.64	.70						
15	.09	.07	.13	.33	.50	.76						
16	.09	.07	.13	.43	.53	.76						
17	.09	.06	.13	.42	.56	.76						
18	.09	.07	.13	.41	.59	.76						
19	.11	.07	.13	.41	.56	.47						
20	.11	.08	.11	.41	.53	.30						
21	.15	.08	.10	.41	.50	.26						
22	.11	.08	.10	.43	.55	.36						
23	.09	.08	.12	.42	.60	.38						
24	.09	.08	.15	.40	.66	.47						
25	.09	.08	.18	.39	.73	.43						
26	.09	.08	.21	.37	.79	.34						
27	.09	.18	.22	.39	1.0	.38						
28	.09	.18	.22	.38	1.1	.56						
29	.11	.18	.23	.40	---	.59						
30	.13	.15	.23	.44	---	.70						
31	.11	---	.23	.48	---	.83						
TOTAL	3.00	2.91	4.66	10.52	16.93	21.39						
MEAN	.097	.097	.15	.34	.60	.69						
MAX	.55	.18	.23	.48	1.1	1.2						
MIN	.01	.06	.10	.23	.46	.26						
AC-FT	6.0	5.8	9.2	21	34	42						

CAL YR 1977 TOTAL 81.31 MEAN .22 MAX 3.3 MIN .00 AC-FT 161

09250400 GOOD SPRING CREEK NEAR AXIAL, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1974 to March 1978 (discontinued).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1975 to March 1978 (discontinued).
WATER TEMPERATURES: October 1975 to March 1978 (discontinued).

INSTRUMENTATION.--Water-quality monitor since October 1975 (discontinued).

REMARKS.--Daily maximum and minimum specific-conductance data available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 2,330 micromhos Feb. 2, 1978; minimum, 745 micromhos Feb. 10, 1976.
WATER TEMPERATURES: Maximum, 25.0°C July 20, 30, 1976; minimum, freezing point on many days during winter months each year.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 2,330 micromhos Feb. 2; minimum, not determined.
WATER TEMPERATURES: Maximum, not determined; minimum, 0.5°C many days during October to February.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
OCT 27...	1000	.11	1980	8.3	3.0	10.5	1100	590	120
NOV 28...	1100	.18	2000	8.2	1.5	--	790	350	84
JAN 05...	1300	.24	2320	8.1	.5	11.2	1200	700	160
FEB 01...	1315	.50	1700	8.1	1.5	14.0	1000	570	140
MAR 08...	1320	.90	1700	8.2	9.0	10.8	960	520	120

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)
OCT 27...	190	110	1.5	14	600	0	490	680	24
NOV 28...	140	99	1.5	6.9	530	0	430	500	34
JAN 05...	190	98	1.2	14	590	0	480	630	20
FEB 01...	160	80	1.1	11	530	0	430	630	15
MAR 08...	160	75	1.1	11	530	0	430	610	21

DATE	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	BORON, DISSOLVED (UG/L AS B)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)
OCT 27...	.7	12	1450	.43	.96	.01	340	30	70
NOV 28...	.4	10	1140	.55	.07	.01	140	30	140
JAN 05...	.5	14	1620	1.05	.08	.01	280	90	160
FEB 01...	.6	12	1310	1.77	.05	.01	220	30	100
MAR 08...	.6	--	--	3.30	--	.01	--	--	--

09250400 GOOD SPRING CREEK NEAR AXIAL, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	ANTI-MONY, DIS-SOLVED (UG/L AS SB)	ARSENIC DIS-SOLVED (UG/L AS AS)	CADMIUM DIS-SOLVED (UG/L AS CD)	COPPER, DIS-SOLVED (UG/L AS CU)	LEAD, DIS-SOLVED (UG/L AS PB)	MERCURY DIS-SOLVED (UG/L AS HG)
JAN 05...	1300	1	1	0	0	2	.0

DATE	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)
JAN 05...	0	1	.0	10	8.2	7.1

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1840	1900	---	1910	2250	1870						
2	1880	1960	---	1970	2270	1860						
3	1930	1960	---	1860	2210	1840						
4	1980	1960	---	1850	2130	1820						
5	2030	1930	---	1900	2090	1770						
6	2050	1920	---	1950	2020	1770						
7	1820	1910	1950	2000	1960	1780						
8	1800	1920	1980	2030	1900	1860						
9	1890	1960	1930	2070	1860	1930						
10	1900	1930	1940	2100	1800	1920						
11	1930	1990	1940	2070	1790	1900						
12	2050	2080	1930	2110	1800	1840						
13	2000	2080	1970	2140	1820	1860						
14	2020	2030	1900	2150	1830	1850						
15	2040	2000	1880	2120	1840	1840						
16	2040	1990	1940	2090	1840	1820						
17	2040	1990	2040	2090	1850	---						
18	2040	1960	1940	2060	1870	---						
19	2020	2010	1940	2100	1850	---						
20	2000	2040	1950	2080	1840	---						
21	1980	2060	1980	2100	1840	1620						
22	1980	1910	1920	2130	1850	1610						
23	1970	1880	1900	2140	1860	1460						
24	1960	1890	1890	2160	1860	1440						
25	1970	1760	1900	2140	1870	1440						
26	1990	1700	1920	2130	1870	1440						
27	1990	---	1910	2140	1870	1430						
28	1950	---	1870	2220	1870	1470						
29	1930	---	1850	2190	---	1400						
30	1930	---	1830	2190	---	1380						
31	1930	---	1860	2220	---	1380						

09250400 GOOD SPRING CREEK NEAR AXIAL, CO--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	13.0	2.5	2.5	.5	---	---	.5	.5	2.0	.5		
2	13.5	2.5	6.5	.5	---	---	.5	.5	1.5	.5		
3	17.0	6.0	7.5	.5	---	---	.5	.5	1.0	.5		
4	15.5	6.0	9.5	2.0	---	---	.5	.5	2.5	.5		
5	16.5	8.5	8.5	2.5	---	---	.5	.5	2.5	.5		
6	14.0	9.0	9.0	4.0	---	---	.5	.5	3.5	1.5		
7	10.0	5.0	8.5	2.5	1.0	.5	1.0	.5	6.5	1.5		
8	12.5	3.5	4.0	.5	1.0	.5	1.0	.5	5.0	.5		
9	10.0	3.5	1.5	.5	1.0	.5	1.0	.5	2.0	.5		
10	8.5	3.0	1.0	.5	1.0	.5	1.0	.5	5.5	1.0		
11	8.0	1.0	1.0	.5	1.0	.5	1.0	.5	5.0	.5		
12	9.0	.5	3.0	.5	1.0	.5	1.5	.5	2.0	.5		
13	10.5	1.0	2.5	.5	1.0	.5	1.0	.5	2.0	.5		
14	11.5	2.0	4.0	.5	3.0	.5	1.5	.5	4.0	.5		
15	11.5	2.5	5.0	1.0	5.5	.5	1.0	.5	2.0	.5		
16	12.0	2.5	6.0	.5	1.0	.5	1.0	.5	2.0	.5		
17	12.0	3.0	3.5	.5	1.0	.5	3.0	.5	.5	.5		
18	12.0	2.5	4.0	1.0	.5	.5	2.5	.5	.5	.5		
19	11.5	2.0	2.0	.5	.5	.5	1.0	.5	.5	.5		
20	12.0	4.0	1.0	.5	.5	.5	2.5	.5	1.0	.5		
21	10.0	6.0	1.0	.5	.5	.5	3.0	.5	2.5	.5		
22	10.0	4.0	1.0	.5	.5	.5	1.0	.5	2.0	.5		
23	10.0	2.0	1.0	.5	.5	.5	1.5	.5	2.5	.5		
24	8.5	2.5	1.0	.5	.5	.5	1.0	.5	3.5	.5		
25	11.0	2.5	.5	.5	.5	.5	.5	.5	5.5	1.0		
26	11.0	2.0	3.5	.5	.5	.5	.5	.5	5.5	1.5		
27	10.5	2.5	1.0	.5	1.0	.5	.5	.5	6.5	.5		
28	12.0	4.0	2.0	.5	.5	.5	1.0	.5	---	---		
29	10.0	4.5	---	---	.5	.5	.5	.5	---	---		
30	9.5	5.0	---	---	1.0	.5	1.5	.5	---	---		
31	4.5	1.0	---	---	.5	.5	1.0	.5	---	---		

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT				
21...	1200	.15	23	.01
27...	1020	.11	20	.01
NOV				
03...	0920	.15	30	.01
10...	1340	E.07	61	.01
17...	1140	E.06	18	<.00
25...	1145	.08	109	.02
28...	1105	.18	18	.01
DEC				
07...	1110	.12	33	.01
16...	1040	.13	35	.01
JAN				
05...	1300	.24	46	.03
FEB				
01...	1315	.50	135	.18
MAR				
08...	1320	.90	173	.42

09250510 TAYLOR CREEK AT MOUTH, NEAR AXIAL, CO

LOCATION.--Lat 40°18'48", long 107°45'57", in NW¼SW¼ sec.14, T.4 N., R.93 W., Moffatt County, Hydrologic Unit 14050002, on right bank 500 ft upstream from confluence with Wilson Creek, about 1,000 ft (300 m) southwest of Gossard ranch house, and 2 mi (3.2 km) north of Axial.

DRAINAGE AREA.--7.22 mi² (18.70 km²).

PERIOD OF RECORD.--August 1975 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,300 ft (1,920 m), from topographic map.

REMARKS.--Records excellent. No diversions. Low dam to prevent erosion 50 ft (15 m) upstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 0.10 ft³/s (0.003 m³/s) Mar. 26, 1977, gage height, 1.68 ft (0.512 m); no flow most days.

EXTREMES FOR CURRENT YEAR.--No flow entire year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

CAL YR 1977 TOTAL 0.27 MEAN .001 MAX .03 MIN .00 AC-FT .5

GREEN RIVER BASIN

09250510 TAYLOR CREEK AT MOUTH, NEAR AXIAL, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1975 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: July 1976 to current year.
WATER TEMPERATURES: July 1976 to current year.

INSTRUMENTATION.--Water-quality monitor since July 1976.

REMARKS.--Daily maximum and minimum specific-conductance data available in district office. Daily water temperatures for 1977 water year revised.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,650 micromhos Oct. 19, 1976; minimum, 371 micromhos Apr. 10, 1977.
WATER TEMPERATURES: Maximum, 32.0°C July 11, 1976; minimum, freezing point many days during winter months each year.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Not determined.
WATER TEMPERATURES: Not determined.

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT				
15...	1010	.01	9	.00
NOV				
05...	1345	.01	131	.00
MAR				
24...	1300	.03	242	.02

09250600 WILSON CREEK NEAR AXIAL, CO

LOCATION.--Lat 40°18'56", long 107°47'50", in NW¼SW¼ sec.14, T.4 N., R.93 W., Moffatt County, Hydrologic Unit 14050002, on right bank about 300 ft (91 m) west of Gossard ranch house, 660 ft (200 m) downstream from mouth of Taylor Creek, and 2.4 mi (3.9 km) north of Axial.

DRAINAGE AREA.--20.1 mi^2 (52.1 km^2), revised.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1974 to current year.

GAGE.--water-stage recorder. Altitude of gage is 6,300 ft (1,920 m), from topographic map.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 33 ft^3/s (0.93 m^3/s) Feb. 9, 1976, gage height, 3.00 ft (0.914 m); minimum discharge, 0.12 ft^3/s (0.003 m^3/s) Jan. 4-9, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 29 ft^3/s (0.821 m^3/s) at 1430 May 19, gage height, 2.82 ft (0.860 m), only peak above base of 20 ft^3/s (0.57 m^3/s); minimum daily, 0.21 ft^3/s (0.006 m^3/s) Sept. 9-13, 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.36	.38	.39	.40	.38	.34	.48	3.6	6.1	1.1	.54	.23
2	.36	.38	.36	.40	.35	.34	.45	3.1	5.6	1.1	.51	.23
3	.37	.38	.36	.40	.35	.36	.45	2.8	5.3	1.1	.42	.23
4	.37	.37	.36	.40	.36	.40	.45	3.4	5.2	1.1	.42	.23
5	.37	.37	.36	.38	.35	.42	.58	4.1	5.1	1.0	.45	.23
6	.38	.36	.37	.37	.36	.42	.45	4.1	4.6	.94	.42	.23
7	.38	.37	.38	.37	.35	.42	.42	4.0	4.2	.85	.36	.23
8	.38	.37	.38	.35	.35	.36	.42	4.0	4.2	.85	.36	.26
9	.38	.39	.41	.37	.35	.36	.42	3.6	4.5	.85	.36	.21
10	.38	.37	.40	.37	.35	.39	.42	3.4	3.8	.90	.34	.21
11	.38	.37	.40	.37	.35	.39	.42	3.7	2.7	.98	.31	.21
12	.37	.37	.41	.38	.35	.42	.42	4.2	2.7	1.1	.31	.21
13	.37	.37	.42	.39	.34	.42	.48	4.3	2.3	.94	.34	.21
14	.36	.37	.41	.38	.34	.42	.48	4.7	2.2	.69	.42	.23
15	.37	.37	.40	.38	.34	.42	.51	5.8	2.3	.73	.45	.23
16	.37	.37	.40	.37	.34	.36	.51	7.0	2.2	.90	.36	.21
17	.37	.36	.39	.37	.33	.36	.54	9.0	1.9	.94	.31	.26
18	.37	.36	.40	.36	.33	.36	.51	10	2.0	.85	.31	.31
19	.37	.36	.39	.37	.33	.39	.54	9.8	2.0	.77	.34	.36
20	.37	.36	.41	.37	.33	.39	.57	8.1	1.6	.85	.29	.34
21	.38	.36	.42	.37	.34	.39	.63	7.8	1.6	.81	.29	.26
22	.38	.36	.40	.38	.37	.39	.63	7.9	1.6	.73	.29	.23
23	.38	.36	.40	.38	.36	.42	.66	7.8	1.5	.66	.29	.23
24	.38	.35	.40	.40	.36	.45	.60	7.8	1.4	.73	.26	.23
25	.38	.35	.40	.39	.33	.42	.57	7.1	1.2	.66	.29	.26
26	.38	.35	.40	.39	.33	.42	.69	6.8	1.2	.60	.26	.23
27	.39	.36	.41	.40	.33	.42	1.2	6.2	1.1	.60	.29	.26
28	.39	.36	.41	.41	.33	.42	1.2	6.2	1.0	.57	.26	.29
29	.38	.36	.41	.40	---	.42	1.6	5.8	1.2	.60	.23	.34
30	.39	.36	.41	.40	---	.42	2.8	6.4	1.2	.63	.23	.34
31	.39	---	.41	.40	---	.45	---	6.4	---	.63	.23	---
TOTAL	11.65	10.97	12.27	11.87	9.68	12.36	20.10	178.9	83.5	25.76	10.54	7.53
MEAN	.38	.37	.40	.38	.35	.40	.67	5.77	2.78	.83	.34	.25
MAX	.39	.39	.42	.41	.38	.45	2.8	10	6.1	1.1	.54	.36
MIN	.36	.35	.36	.35	.33	.34	.42	2.8	1.0	.57	.23	.21
AC-FT	23	22	24	24	19	25	40	355	166	51	21	15

CAL YR 1977 TOTAL 156.68 MEAN .43 MAX .97 MIN .12 AC-FT 311
WTR YR 1978 TOTAL 395.13 MEAN 1.08 MAX 10 MIN .21 AC-FT 784

09250600 WILSON CREEK NEAR AXIAL, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--May 1975 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1975 to current year.
WATER TEMPERATURE: October 1975 to current year.
SUSPENDED-SEDIMENT DISCHARGE: October 1975 to current year.

INSTRUMENTATION.--Water-quality monitor since October 1975. Pumping sediment sampler since October 1975.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 2,780 micromhos Oct. 7, 1975; minimum, 520 micromhos Feb. 9, 1976.
WATER TEMPERATURES: Maximum, 27.5°C Aug. 12, 1976; minimum, 0.0°C many days during January 1976.
SEDIMENT CONCENTRATIONS: Maximum daily, 18,800 mg/L Mar. 13, 1976; minimum daily, 5 mg/L estimated for several days in January 1977.
SEDIMENT LOADS: Maximum daily, 207 tons (188 t) Feb. 27, 1976; minimum daily, 0.00 ton (0.00 t) several days in January 1977.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 2,250 micromhos Mar. 15; minimum, 869 micromhos May 17.
WATER TEMPERATURES: Maximum, 26.5°C July 14; minimum, 1.0°C many days during November to February.
SEDIMENT CONCENTRATIONS: Maximum daily, 5,380 mg/L May 1; minimum daily, 10 mg/L, Sept. 12.
SEDIMENT LOADS: Maximum daily, 128 tons (116 t) May 19; minimum daily, 0.01 ton (0.01 t) several days in September.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
OCT									
27...	1145	.39	2000	8.3	7.0	11.2	770	360	110
NOV									
28...	1000	.37	2000	8.2	6.0	--	770	360	110
JAN									
05...	1100	.36	1800	8.1	4.0	10.6	810	400	110
FEB									
02...	1300	.35	1900	8.1	5.0	--	770	380	110
MAR									
08...	1120	.38	2000	8.1	8.0	10.2	810	400	110
APR									
17...	1245	.53	1900	8.1	9.0	10.2	770	340	110
MAY									
15...	1600	6.3	1200	8.3	18.5	7.0	410	180	80
JUL									
05...	1200	1.1	1700	8.5	21.0	8.9	620	330	95
24...	1255	.73	1700	8.2	21.5	9.4	600	--	91
AUG									
17...	1600	.34	1850	8.3	20.5	9.3	690	320	96
SEP									
30...	1145	.26	1880	8.2	12.5	12.2	730	340	110

09250600 WILSON CREEK NEAR AXIAL, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)
OCT									
27...	120	180	2.8	10	500	0	410	510	160
NOV									
28...	120	190	3.0	10	500	0	410	520	150
JAN									
05...	130	180	2.8	9.5	500	0	410	520	160
FEB									
02...	120	180	2.8	9.5	480	0	390	480	150
MAR									
08...	130	170	2.6	9.9	500	0	410	500	170
APR									
17...	120	170	2.7	10	520	0	430	430	160
MAY									
15...	50	93	2.0	7.0	280	0	230	210	110
JUL									
05...	93	160	2.8	9.0	350	1	290	340	170
24...	90	160	2.8	8.9	--	0	--	370	160
AUG									
17...	110	160	2.6	10	450	0	370	440	160
SEP									
30...	110	170	2.7	9.2	470	0	390	450	150

DATE	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	BORON, DISSOLVED (UG/L AS B)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)
OCT									
27...	.7	16	1360	1.43	.44	.01	220	10	80
NOV									
28...	.6	16	1370	1.37	.41	.01	230	30	80
JAN									
05...	.3	17	1370	1.33	--	--	220	--	90
FEB									
02...	.6	16	1300	1.23	.28	.01	220	30	80
MAR									
08...	.6	14	1350	1.39	.39	.00	220	120	90
APR									
17...	.6	14	1270	1.82	.33	.01	210	20	80
MAY									
15...	.4	10	703	12.0	1.1	.01	--	20	70
JUL									
05...	.5	10	1050	3.12	.22	.02	190	30	40
24...	.5	15	--	--	.13	.01	200	20	30
AUG									
17...	.6	15	1210	1.11	.19	.01	230	40	40
SEP									
30...	.6	16	1250	.88	.16	.00	280	20	40

09250600 WILSON CREEK NEAR AXIAL, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ALUMINUM, DISSOLVED (UG/L AS AL)	ANTIMONY, DISSOLVED (UG/L AS SB)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
JAN									
05...	1100	--	--	2	--	1	--	0	--
SEP									
30...	1145	40	0	--	0	0	2	0	1

DATE	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	MOLYBDENUM, DISSOLVED (UG/L AS MO)
JAN									
05...	0	--	--	2	--	--	.0	--	--
SEP									
30...	1	140	0	3	40	.0	.0	5	2

DATE	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DISSOLVED (MG/L AS C)
JAN								
05...	--	0	--	6	--	--	5.5	3.8
SEP								
30...	10	0	6	8	20	10	2.9	3.4

09250600 WILSON CREEK NEAR AXIAL, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1840	1940	---	1780	1850	1950	2010	1380	1350	1640	1690	1860
2	1820	1940	---	1790	1990	1890	2030	1430	1360	1630	1720	---
3	1820	1940	---	1810	1990	1870	2030	1430	1390	1640	1760	---
4	1820	1930	---	1800	1940	1870	2030	1290	1400	1670	1760	---
5	1810	1910	---	1790	1900	1930	2070	1260	1410	1660	1740	---
6	1820	1920	---	1790	1920	1840	2070	1340	1430	1620	1740	---
7	1830	1910	2030	1790	1950	1870	2040	1350	1450	1640	1750	---
8	1830	1900	1990	1820	1950	1970	2050	1200	1420	1650	1750	1860
9	1820	1890	1920	1830	1960	2070	2040	1280	1410	---	1750	1830
10	1820	1900	1910	1870	1980	1980	2050	1320	1470	---	1750	---
11	1810	1890	1910	1860	1970	1940	2100	1310	1480	---	1760	---
12	1830	1890	1880	1850	1960	1920	2050	1300	1490	---	1770	---
13	1810	1870	1860	1850	1960	1950	1920	1310	1520	---	1750	---
14	1800	1870	1850	1850	1950	1970	1940	1320	1470	---	1710	---
15	1800	1850	1800	1860	1940	2020	1890	1120	1470	---	1700	---
16	1820	1840	1780	1860	1920	1970	1860	915	1500	---	1780	---
17	1840	1910	1780	1820	1940	1980	1850	949	1420	---	1880	---
18	1860	1980	1770	1830	1960	1970	1990	1170	1380	---	1900	---
19	1890	1970	1790	1860	1920	1970	1890	1160	1450	---	1890	---
20	1910	1940	1790	1840	1900	2060	1840	1240	1520	---	1860	---
21	1930	1900	1760	1860	1890	2000	1720	1250	1530	---	1820	---
22	1940	1930	1770	1800	1920	1960	1770	1270	1600	---	1850	---
23	1950	1920	1780	1860	1860	2010	1740	1090	1600	---	1890	---
24	1980	1890	1790	1860	1870	2030	1750	1060	1550	1640	1890	---
25	2000	1890	1790	1850	1870	2060	1720	1230	1590	1660	1870	1910
26	1990	1860	1800	1850	1860	2050	1780	1230	1590	1730	1920	1900
27	1980	1820	1810	1840	1880	2040	1580	1250	1620	1760	1820	1880
28	1980	1890	1830	1820	1950	2040	1520	1270	1640	1760	1850	1880
29	1960	---	1820	1850	---	2030	1450	1280	1610	1730	1920	1880
30	1930	---	1820	1860	---	2010	1430	1280	1610	1680	1960	1860
31	1930	---	1810	1830	---	2020	---	1300	---	1680	1900	---

09250600 WILSON CREEK NEAR AXIAL, CO--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	16.0	4.5	9.0	1.5	---	---	3.0	1.5	6.0	3.0	6.0	4.5
2	16.5	3.5	10.5	3.0	---	---	2.5	2.0	6.5	2.5	6.0	3.5
3	18.5	5.5	11.0	2.5	---	---	4.5	2.5	6.5	3.0	5.5	2.5
4	16.5	5.5	12.0	4.0	---	---	5.5	4.0	6.5	2.5	6.0	2.0
5	16.5	8.0	10.5	4.0	---	---	4.0	4.0	6.0	2.0	7.0	4.5
6	15.0	8.5	11.5	6.0	---	---	5.5	3.5	6.5	4.0	8.5	5.0
7	13.5	7.5	10.5	4.5	7.5	4.5	5.0	2.0	7.5	4.5	9.0	5.0
8	15.0	5.0	6.0	1.0	5.0	1.0	5.0	2.0	6.5	3.5	13.0	3.0
9	11.5	4.5	6.0	1.0	6.0	1.0	6.0	3.5	5.0	2.0	13.5	2.5
10	10.0	4.5	8.0	1.5	7.0	2.5	6.0	4.5	7.5	4.5	8.5	3.0
11	12.5	2.0	9.0	1.0	7.0	2.0	7.0	4.5	6.5	4.0	9.5	4.0
12	14.0	2.0	9.5	3.0	6.0	2.5	5.0	3.5	5.5	1.5	10.0	4.5
13	15.0	2.5	8.5	1.0	6.5	1.5	5.0	2.0	5.5	2.0	8.5	4.0
14	14.0	3.5	8.5	2.5	7.5	4.5	5.5	2.0	6.0	3.0	9.0	3.5
15	14.0	4.0	8.5	4.0	7.5	2.0	6.0	4.0	5.5	2.5	9.0	1.5
16	14.0	4.0	8.5	2.5	4.5	1.5	6.0	2.5	5.0	2.0	11.0	1.5
17	14.0	4.0	7.5	2.5	5.0	1.5	6.0	3.5	3.5	2.0	13.5	2.0
18	13.5	3.5	8.5	3.5	4.0	2.0	6.5	2.0	3.5	1.0	14.0	3.0
19	11.5	3.5	5.0	1.0	2.0	1.5	5.5	2.5	4.5	2.5	11.0	3.5
20	12.5	4.5	1.5	1.0	2.0	1.5	6.0	2.5	5.0	3.0	9.5	4.0
21	10.5	7.0	5.0	1.0	1.5	1.5	6.5	4.0	6.0	2.5	15.5	3.5
22	11.5	5.5	6.0	2.5	4.0	1.5	5.0	2.0	5.5	2.0	8.0	5.0
23	11.5	4.0	7.0	2.5	5.0	3.0	5.5	3.0	5.5	2.0	10.5	5.5
24	10.0	4.0	7.5	2.5	5.0	3.5	3.0	2.0	6.0	2.0	8.5	3.0
25	12.5	4.0	8.0	5.5	4.5	2.5	4.5	1.0	7.0	4.0	14.0	3.0
26	12.0	4.0	8.0	3.5	4.5	2.5	4.5	2.5	7.0	4.5	15.5	4.5
27	13.0	4.5	6.5	3.0	5.0	2.0	4.5	2.0	7.0	4.0	16.0	4.0
28	12.5	5.5	6.5	4.5	5.5	4.0	3.5	2.0	7.0	3.0	14.5	4.5
29	12.5	5.5	---	---	6.0	4.5	4.5	2.0	---	---	16.5	4.0
30	11.0	5.5	---	---	7.0	4.0	5.5	3.5	---	---	14.5	4.5
31	7.5	3.0	---	---	4.5	2.5	5.0	2.5	---	---	15.5	6.0

09250600 WILSON CREEK NEAR AXIAL, CO--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	9.5	7.0	12.5	7.5	19.0	7.0	24.0	12.0	22.5	12.0	22.0	7.0
2	12.0	6.0	16.0	8.0	18.0	7.5	24.0	11.0	23.0	8.5	20.5	7.0
3	10.0	6.0	14.5	10.0	17.0	9.0	23.0	10.5	24.5	9.0	22.5	7.5
4	13.0	4.5	12.0	6.5	17.5	9.5	22.5	10.5	24.5	8.5	21.5	7.5
5	9.0	5.5	9.5	5.5	16.0	10.0	20.5	9.5	25.0	7.0	22.5	8.0
6	11.0	5.5	8.0	5.5	20.0	8.5	23.5	14.5	24.0	8.0	22.5	8.5
7	16.0	6.0	7.5	4.5	17.0	9.5	24.5	10.0	25.5	9.0	16.5	9.0
8	10.5	6.5	9.0	5.0	21.5	9.0	24.5	11.0	24.0	8.5	20.5	9.0
9	9.0	6.0	14.0	4.5	21.5	6.5	22.5	10.0	23.5	9.0	18.5	7.5
10	12.5	3.5	14.5	8.0	19.5	12.0	21.5	11.0	23.0	9.0	---	---
11	18.5	5.0	12.0	9.0	22.0	10.5	---	---	23.5	9.0	---	---
12	20.0	3.5	15.0	7.0	21.0	8.5	25.0	13.0	22.5	11.0	---	---
13	13.5	4.5	17.0	8.0	22.0	9.5	25.5	10.5	19.0	11.5	---	---
14	17.5	5.0	18.0	9.5	20.5	8.5	26.5	10.5	16.0	9.0	---	---
15	17.5	6.0	18.0	10.0	21.5	10.5	21.5	11.0	22.0	7.0	---	---
16	17.5	4.0	17.5	10.5	21.0	10.0	20.5	11.5	22.0	8.0	---	---
17	9.5	3.5	13.0	8.5	21.5	10.0	24.0	13.0	20.5	8.5	---	---
18	17.0	2.0	13.0	7.0	20.5	9.0	22.5	12.0	19.5	8.0	---	---
19	17.0	2.0	18.0	7.5	21.5	11.0	22.0	12.5	22.5	5.5	---	---
20	17.5	3.5	19.0	8.0	22.0	10.0	---	---	20.5	7.0	---	---
21	7.5	3.5	13.5	10.5	22.5	10.5	---	---	20.5	8.0	---	---
22	13.5	2.0	17.0	8.5	22.5	12.5	---	---	20.0	10.5	---	---
23	13.0	4.5	17.5	8.5	23.0	12.0	---	---	23.0	9.0	---	---
24	18.0	4.5	18.0	8.5	23.0	13.5	26.0	12.0	21.0	7.0	---	---
25	17.5	6.5	17.0	8.0	22.5	13.5	25.5	10.0	21.0	8.5	17.5	8.5
26	15.5	6.5	17.5	7.0	22.0	10.5	26.0	9.5	21.0	7.5	18.0	6.0
27	12.0	2.0	16.5	9.0	22.5	10.5	26.0	9.0	21.5	7.0	17.0	6.0
28	12.0	7.5	17.5	9.0	21.0	11.0	21.0	12.0	22.5	6.5	18.5	8.5
29	13.5	7.0	19.5	8.5	20.0	12.0	23.5	12.5	22.5	6.5	19.0	8.0
30	10.5	8.0	19.0	9.5	21.5	12.0	25.5	10.5	21.0	6.5	17.5	9.5
31	---	---	19.0	9.0	---	---	21.5	9.5	20.5	7.5	---	---

09250600 WILSON CREEK NEAR AXIAL, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	.36	27	.03	.38	---	.04	.39	---	.05
2	.36	24	.02	.38	---	.04	.36	---	.04
3	.37	35	.03	.38	---	.04	.36	---	.04
4	.37	34	.03	.37	---	.04	.36	---	.04
5	.37	20	.02	.37	---	.04	.36	---	.04
6	.38	22	.02	.36	---	.04	.37	---	.04
7	.38	22	.02	.37	---	.04	.38	65	.07
8	.38	22	.02	.37	---	.04	.38	65	.07
9	.38	22	.02	.39	25	.03	.41	---	.05
10	.38	19	.02	.37	---	.04	.40	---	.05
11	.38	18	.02	.37	---	.04	.40	---	.05
12	.37	34	.03	.37	---	.04	.41	---	.05
13	.37	38	.04	.37	---	.04	.42	---	.05
14	.36	43	.04	.37	---	.04	.41	---	.05
15	.37	38	.04	.37	---	.04	.40	---	.05
16	.37	30	.03	.37	---	.04	.40	---	.05
17	.37	24	.02	.36	59	.06	.39	---	.05
18	.37	22	.02	.36	51	.05	.40	---	.05
19	.37	20	.02	.36	45	.04	.39	---	.05
20	.37	24	.02	.36	---	.04	.41	---	.05
21	.38	27	.03	.36	---	.04	.42	---	.05
22	.38	30	.03	.36	---	.04	.40	---	.05
23	.38	24	.02	.36	---	.04	.40	---	.05
24	.38	24	.02	.35	---	.04	.40	---	.05
25	.38	22	.02	.35	---	.04	.40	---	.05
26	.38	---	.04	.35	---	.04	.40	---	.05
27	.39	22	.02	.36	---	.04	.41	---	.05
28	.39	16	.02	.36	---	.04	.41	---	.05
29	.38	27	.03	.36	---	.04	.41	---	.05
30	.39	38	.04	.36	---	.04	.41	---	.05
31	.39	22	.02	---	---	---	.41	---	.05
TOTAL	11.65	---	0.80	10.97	---	1.22	12.27	---	1.54

09250600 WILSON CREEK NEAR AXIAL, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JANUARY			FEBRUARY			MARCH	
1	.40	---	.05	.38	---	.04	.34	35	.03
2	.40	---	.05	.35	30	.03	.34	25	.02
3	.40	---	.05	.35	---	.04	.36	30	.03
4	.40	---	.05	.36	---	.04	.40	38	.04
5	.38	45	.05	.35	---	.04	.42	---	.05
6	.37	---	.04	.36	---	.04	.42	160	.18
7	.37	---	.04	.35	---	.04	.42	115	.13
8	.35	---	.04	.35	---	.04	.36	35	.03
9	.37	---	.04	.35	---	.04	.36	40	.04
10	.37	---	.04	.35	---	.04	.39	100	.11
11	.37	---	.04	.35	---	.04	.39	100	.11
12	.38	---	.04	.35	---	.04	.42	310	.35
13	.39	---	.05	.34	---	.03	.42	240	.27
14	.38	---	.04	.34	---	.03	.42	28	.03
15	.38	---	.04	.34	---	.03	.42	---	.05
16	.37	---	.04	.34	---	.03	.36	78	.08
17	.37	---	.04	.33	---	.03	.36	---	.04
18	.36	---	.04	.33	---	.03	.36	66	.06
19	.37	---	.04	.33	---	.03	.39	---	.05
20	.37	---	.04	.33	---	.03	.39	162	.17
21	.37	---	.04	.34	---	.03	.39	474	.50
22	.38	---	.04	.37	---	.04	.39	118	.12
23	.38	---	.04	.36	---	.04	.42	98	.11
24	.40	---	.05	.36	---	.04	.45	81	.10
25	.39	---	.05	.33	---	.03	.42	77	.09
26	.39	---	.05	.33	---	.03	.42	55	.06
27	.40	---	.05	.33	32	.03	.42	59	.07
28	.41	---	.05	.33	35	.03	.42	77	.09
29	.40	---	.05	---	---	---	.42	105	.12
30	.40	---	.05	---	---	---	.42	110	.12
31	.40	---	.05	---	---	---	.45	106	.13
TOTAL	11.87	---	1.38	9.68	---	0.98	12.36	---	3.38

09250600 WILSON CREEK NEAR AXIAL, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	.48	125	.16	3.6	5380	50	6.1	624	10
2	.45	100	.12	3.1	2200	18	5.6	506	7.7
3	.45	93	.11	2.8	615	4.6	5.3	484	6.9
4	.45	86	.10	3.4	1600	15	5.2	379	5.3
5	.58	151	.30	4.1	650	7.2	5.1	390	5.4
6	.45	144	.17	4.1	463	5.1	4.6	400	5.0
7	.42	144	.16	4.0	350	3.8	4.2	414	4.7
8	.42	184	.21	4.0	350	3.8	4.2	395	4.5
9	.42	189	.21	3.6	393	3.8	4.5	437	5.3
10	.42	155	.18	3.4	400	3.7	3.8	766	10
11	.42	101	.11	3.7	835	8.3	2.7	500	3.6
12	.42	258	.29	4.2	483	5.5	2.7	335	2.4
13	.48	345	.45	4.3	562	6.5	2.3	305	1.9
14	.48	216	.28	4.7	773	9.8	2.2	250	1.5
15	.51	207	.28	5.8	612	9.6	2.3	280	1.7
16	.51	237	.33	7.0	1260	24	2.2	175	1.0
17	.54	258	.38	9.0	1600	41	1.9	176	.90
18	.51	174	.24	10	1350	36	2.0	186	1.0
19	.54	179	.26	9.8	4000	128	2.0	211	1.1
20	.57	195	.30	8.1	2000	44	1.6	163	.70
21	.63	350	.60	7.8	1500	32	1.6	150	.65
22	.63	132	.22	7.9	1410	30	1.6	165	.71
23	.66	142	.25	7.8	1360	29	1.5	165	.67
24	.60	110	.18	7.8	1180	25	1.4	216	.82
25	.57	247	.38	7.1	---	19	1.2	117	.38
26	.69	198	.37	6.8	888	16	1.2	64	.21
27	1.2	221	.72	6.2	735	12	1.1	---	.25
28	1.2	272	.88	6.2	792	13	1.0	92	.25
29	1.6	420	1.8	5.8	---	10	1.2	---	.30
30	2.8	840	6.4	6.4	964	17	1.2	88	.29
31	---	---	---	6.4	627	11	---	---	---
TOTAL	20.10	---	16.44	178.9	---	641.7	83.5	---	85.13

09250600 WILSON CREEK NEAR AXIAL, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JULY			AUGUST			SEPTEMBER	
1	1.1	89	.26	.54	24	.03	.23	85	.05
2	1.1	80	.24	.51	40	.06	.23	72	.04
3	1.1	110	.33	.42	49	.06	.23	58	.04
4	1.1	84	.25	.42	33	.04	.23	50	.03
5	1.0	79	.21	.45	37	.04	.23	34	.02
6	.94	66	.17	.42	45	.05	.23	74	.04
7	.85	66	.15	.36	41	.04	.23	53	.03
8	.85	70	.16	.36	41	.04	.26	17	.01
9	.85	62	.14	.36	66	.06	.21	36	.02
10	.90	74	.18	.34	74	.07	.21	37	.02
11	.98	86	.23	.31	98	.08	.21	33	.02
12	1.1	94	.28	.31	53	.04	.21	10	.01
13	.94	90	.23	.34	66	.06	.21	22	.01
14	.69	86	.16	.42	111	.12	.23	33	.02
15	.73	57	.11	.45	70	.08	.23	50	.03
16	.90	45	.11	.36	70	.07	.21	16	.01
17	.94	66	.17	.31	25	.02	.26	---	.02
18	.85	53	.12	.31	22	.02	.31	---	.03
19	.77	64	.13	.34	71	.06	.36	19	.01
20	.85	56	.13	.29	82	.06	.34	35	.03
21	.81	59	.13	.29	59	.05	.26	---	.04
22	.73	36	.07	.29	46	.04	.23	56	.03
23	.66	40	.07	.29	55	.04	.23	48	.03
24	.73	24	.05	.26	30	.02	.23	47	.03
25	.66	40	.07	.29	47	.04	.26	28	.02
26	.60	30	.05	.26	27	.02	.23	20	.01
27	.60	28	.05	.29	39	.03	.26	44	.03
28	.57	45	.07	.26	89	.06	.29	39	.03
29	.60	26	.04	.23	89	.06	.34	18	.02
30	.63	26	.04	.23	56	.03	.34	22	.02
31	.63	17	.03	.23	57	.04	---	---	---
TOTAL	25.76	---	4.43	10.54	---	1.53	7.53	---	0.75
YEAR	395.13		759.28						

09250610 JUBB CREEK NEAR AXIAL, CO

LOCATION.--Lat 40°18'45", long 107°49'18", in SE¼SE¼ sec.16, T.4 N., R.93 W., Moffatt County, Hydrologic Unit 14050002, on right bank about 500 ft (152 m) upstream from unnamed tributary and 2.4 mi (3.9 km) northwest of Axial.

DRAINAGE AREA.--7.53 mi^2 (19.50 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1975 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,400 ft (1,951 m), from topographic map.

REMARKS.--Records good except those for winter period, which are fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5.5 ft^3/s (0.16 m^3/s), Feb. 9, 1976, result of discharge measurement, may have been higher; maximum gage height, 2.30 ft (0.70 m) Feb. 26, 1976 (backwater from ice); no flow many days each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 0.21 ft^3/s (0.006 m^3/s) Oct. 7, gage height, 1.91 ft (0.582 m); no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.03	.02	.00	.00	.00	.00
2	.00	.01	.00	.00	.00	.00	.02	.01	.00	.00	.00	.00
3	.00	.01	.03	.00	.00	.00	.02	.01	.00	.00	.00	.00
4	.00	.01	.02	.00	.00	.00	.01	.01	.00	.00	.00	.00
5	.00	.01	.01	.00	.00	.00	.01	.03	.00	.00	.00	.00
6	.00	.01	.00	.00	.00	.00	.01	.02	.00	.00	.00	.00
7	.04	.01	.00	.00	.00	.00	.01	.02	.00	.00	.00	.00
8	.00	.01	.01	.00	.00	.00	.01	.02	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.01	.01	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.01	.01	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.01	.01	.00	.00	.00	.00
12	.01	.00	.00	.00	.00	.00	.01	.01	.00	.00	.00	.00
13	.01	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.01	.01	.01	.00	.00	.00	.00
18	.00	.01	.00	.00	.00	.02	.01	.01	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.03	.01	.01	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.12	.00	.01	.00	.00	.00	.00
21	.02	.00	.00	.00	.00	.03	.01	.01	.00	.00	.00	.00
22	.01	.00	.00	.00	.00	.03	.00	.00	.00	.00	.00	.00
23	.00	.02	.00	.00	.00	.03	.00	.00	.00	.00	.00	.00
24	.00	.02	.00	.00	.00	.04	.00	.00	.00	.00	.00	.00
25	.00	.02	.00	.00	.00	.01	.00	.00	.00	.00	.00	.00
26	.00	.03	.00	.00	.00	.01	.00	.00	.00	.00	.00	.00
27	.00	.01	.00	.00	.00	.02	.01	.00	.00	.00	.00	.00
28	.00	.01	.00	.00	.00	.02	.01	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	---	.02	.02	.00	.00	.00	.00	.00
30	.01	.01	.00	.00	---	.01	.02	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.01	---	.00	---	.00	.00	---
TOTAL	.10	.20	.07	.00	.00	.41	.30	.23	.00	.00	.00	.00
MEAN	.003	.007	.002	.000	.000	.013	.010	.007	.000	.000	.000	.000
MAX	.04	.03	.03	.00	.00	.12	.03	.03	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.2	.4	.1	.00	.00	.8	.6	.5	.00	.00	.00	.00

CAL YR 1977 TOTAL 3.72 MEAN .010 MAX .89 MIN .00 AC-FT 7.4
WTR YR 1978 TOTAL 1.31 MEAN .004 MAX .12 MIN .00 AC-FT 2.6

09250610 JUBB CREEK NEAR MOUTH, NEAR AXIAL, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1975 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: July 1976 to current year.
WATER TEMPERATURES: July 1976 to current year.

INSTRUMENTATION.--Water-quality monitor since July 1976.

REMARKS.--Daily maximum and minimum specific-conductance data available in district office.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 2,780 micromhos Dec. 8; minimum, 819 micromhos Oct. 7.
WATER TEMPERATURES: Maximum, 28.0°C May 20; minimum, 0.5°C many days during October to December.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT 21...	1100	.01	1700	8.5	6.0	9.3	840	390	72
NOV 28...	0900	<.01	2120	8.1	.5	--	1200	700	150
APR 17...	1125	.01	1625	8.1	9.0	10.0	810	370	78
MAY 15...	1015	<.01	1800	8.5	16.0	7.9	860	410	65

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
OCT 21...	160	110	1.7	8.8	520	13	450	590	40
NOV 28...	190	120	1.5	15	610	0	500	830	21
APR 17...	150	98	1.5	5.6	540	0	440	490	40
MAY 15...	170	120	1.8	6.0	530	12	450	560	39

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
OCT 21...	.4	9.6	1260	.03	.04	.01	170	20	20
NOV 28...	.6	14	1660	.04	.10	.01	310	40	220
APR 17...	.3	6.5	1140	.03	.02	.01	150	30	10
MAY 15...	.3	1.7	1240	.01	.00	.03	200	110	0

09250610 JUBB CREEK NEAR MOUTH, NEAR AXIAL, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---			---	1320	1370				
2	---	1960	---			---	1320	1500				
3	---	1760	1630			---	1320	1610				
4	---	1740	1410			---	1400	1610				
5	---	1800	1620			---	1400	1320				
6	---	1790	---			---	1430	1360				
7	1150	1750	---			---	1510	1380				
8	---	1790	2430			---	1560	1370				
9	---	---	---			---	1540	1520				
10	---	---	---			---	1600	1610				
11	---	---	---			---	1590	1650				
12	1890	---	---			---	1610	1660				
13	1830	---	---			---	1640	---				
14	---	---	---			---	1650	---				
15	---	---	---			---	1630	---				
16	---	---	---			---	1620	---				
17	---	---	---			1250	1600	1490				
18	---	1630	---			1070	1690	1400				
19	---	---	---			1070	1650	1480				
20	---	---	---			1060	---	1520				
21	1840	---	---			1050	1630	1480				
22	1840	---	---			1080	---	---				
23	---	1840	---			1160	---	---				
24	---	1870	---			1070	---	---				
25	---	1670	---			1200	---	---				
26	---	1260	---			1330	---	---				
27	---	1330	---			1260	1710	---				
28	---	1580	---			1230	1680	---				
29	---	---	---			1190	1600	---				
30	1820	1810	---			1280	1530	---				
31	---	---	---			1360	---	---				

09250610 JUBB CREEK NEAR MOUTH, NEAR AXIAL, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	---	---	---	---					---	---
2	---	---	3.0	.5	---	---					---	---
3	---	---	4.0	.5	1.5	.5					---	---
4	---	---	10.5	.5	2.0	.5					---	---
5	---	---	10.5	1.0	1.5	.5					---	---
6	---	---	11.0	2.5	---	---					---	---
7	13.0	8.0	8.5	1.0	---	---					---	---
8	---	---	2.0	1.0	1.0	.5					---	---
9	---	---	---	---	---	---					---	---
10	---	---	---	---	---	---					---	---
11	---	---	---	---	---	---					---	---
12	9.5	.5	---	---	---	---					---	---
13	12.5	.5	---	---	---	---					---	---
14	---	---	---	---	---	---					---	---
15	---	---	---	---	---	---					---	---
16	---	---	---	---	---	---					---	---
17	---	---	---	---	---	---					1.0	1.0
18	---	---	4.5	1.0	---	---					2.0	1.0
19	---	---	---	---	---	---					5.0	1.0
20	---	---	---	---	---	---					12.5	1.0
21	11.0	6.0	---	---	---	---					16.0	1.0
22	13.0	2.5	---	---	---	---					8.5	2.0
23	---	---	1.0	.5	---	---					14.0	2.5
24	---	---	1.0	1.0	---	---					9.5	1.0
25	---	---	1.0	.5	---	---					15.0	1.0
26	---	---	1.0	.5	---	---					22.5	1.5
27	---	---	1.5	.5	---	---					22.5	1.0
28	---	---	1.0	.5	---	---					23.0	1.5
29	---	---	---	---	---	---					24.0	1.0
30	11.0	3.0	1.0	1.0	---	---					21.5	2.0
31	---	---	---	---	---	---					22.5	4.5

09250610 JUBB CREEK NEAR MOUTH, NEAR AXIAL, CO--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	12.5	6.5	22.5	5.5								
2	18.5	4.5	26.5	5.5								
3	16.0	4.0	22.0	9.5								
4	19.0	1.5	21.0	1.5								
5	15.0	3.5	14.0	2.0								
6	22.5	3.0	13.5	4.0								
7	24.0	5.0	13.0	2.0								
8	25.5	5.5	13.5	4.0								
9	11.5	2.0	27.0	1.5								
10	19.0	1.5	25.5	6.0								
11	24.0	3.0	18.0	8.0								
12	24.0	2.0	26.5	5.0								
13	15.5	4.5	---	---								
14	19.5	5.0	---	---								
15	19.5	6.0	---	---								
16	21.5	3.0	---	---								
17	9.5	2.0	13.5	7.5								
18	21.0	1.0	19.5	6.0								
19	22.0	2.0	27.0	5.0								
20	---	---	28.0	5.5								
21	8.5	1.0	20.0	11.0								
22	---	---	---	---								
23	---	---	---	---								
24	---	---	---	---								
25	---	---	---	---								
26	---	---	---	---								
27	17.5	7.5	---	---								
28	17.5	7.0	---	---								
29	22.0	5.5	---	---								
30	16.5	7.0	---	---								
31	---	---	---	---								

09250610 JUBB CREEK NEAR MOUTH, NEAR AXIAL, CO--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT				
15...	0900	.07	7	.00
NOV				
12...	1030	.05	65	.01

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SEDI-MENT, SUS-PENDED (MG/L) (80154)
OCT		
21...	1045	46
NOV		
28...	1000	4

09251000 YAMPA RIVER NEAR MAYBELL, CO

LOCATION.--Lat 40°30'10", long 108°01'45", in NW¼ sec.2, T.6 N., R.95 W., Moffat County, Hydrologic Unit 14050002, on left bank 100 ft (30 m) downstream from bridge on U.S. Highway 40, 2.0 mi (3.2 km) downstream from Lay Creek, and 3.0 mi (4.8 km) east of Maybell.

DRAINAGE AREA.--3,410 mi^2 (8,830 km^2), approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1904 to October 1905, June 1910 to November 1912, April 1916 to current year. Monthly discharge only for some periods, published in WSP 1313. No winter records prior to 1917.

GAGE.--Water-stage recorder. Datum of gage is 5,900.23 ft (1,798.390 m), National Geodetic Vertical Datum of 1929. See WSP 1733 for history of changes prior to Mar. 9, 1937.

REMARKS.--Records good except those for winter period, which are poor. Natural flow of stream affected by transbasin diversions, numerous storage reservoirs, and diversions above station for irrigation of about 65,000 acres (263 km^2) above and about 800 acres (3.24 km^2) below station.

AVERAGE DISCHARGE.--62 years (water years 1917-78), 1,541 ft^3/s (43.64 m^3/s), 1,116,000 acre-ft/yr (1.376 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 17,900 ft^3/s (507 m^3/s) May 19, 1917, gage height, 10.4 ft (3.17 m), from floodmarks, site and datum then in use, from rating curve extended above 12,000 ft^3/s (340 m^3/s); minimum daily, 2.0 ft^3/s (0.057 m^3/s) July 17-19, 1934.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 7,000 ft^3/s (200 m^3/s) and maximums (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
May 18	1130	10,640	301	8.35	2.545	June 13	0100	*11,570	328	8.72	2.658
May 26	1430	10,040	284	8.10	2.469						

Minimum daily discharge, 79 ft^3/s (2.24 m^3/s) Oct. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	86	202	188	190	250	330	2180	4720	8660	6570	894	226
2	81	256	212	190	250	335	3340	4600	8120	6490	852	219
3	79	226	217	190	250	340	3410	4850	8280	5870	845	222
4	82	222	196	200	250	350	3040	5600	8330	5490	775	205
5	88	230	200	200	250	360	2640	5390	8730	5030	698	194
6	99	205	190	200	250	370	2720	4470	8540	4480	663	161
7	146	233	180	200	250	370	2640	3970	7900	4030	582	256
8	162	236	170	200	250	410	3070	3520	8220	3740	552	316
9	241	208	160	210	250	395	3810	3330	8420	3650	516	208
10	322	190	200	210	260	395	3860	3040	9050	3440	486	174
11	244	170	210	210	270	405	2940	3330	9940	3330	464	164
12	236	155	210	220	280	405	2990	3640	10900	3310	464	161
13	230	155	190	220	280	405	3830	3700	11500	3920	442	140
14	205	155	180	220	280	405	3610	4130	10800	3420	474	143
15	205	155	160	220	290	410	3740	5800	10500	2910	546	158
16	212	113	150	230	290	410	3980	7990	10700	2630	726	149
17	208	188	140	230	290	415	4290	9740	10600	2550	712	128
18	198	216	140	230	290	420	3610	10400	10700	2900	635	149
19	191	202	140	230	290	425	2750	8280	9840	2620	516	164
20	191	180	140	230	290	430	2640	6440	8970	2230	458	188
21	191	170	150	240	290	442	2970	6500	8630	2050	486	208
22	188	160	150	240	290	588	3360	7350	8150	1860	415	226
23	180	150	150	240	290	726	2800	8020	8250	1620	395	226
24	188	149	160	240	300	775	2320	9230	8360	1380	400	226
25	198	205	160	250	310	803	2400	9750	8510	1210	385	256
26	194	244	160	250	320	754	3090	9880	8430	1080	360	268
27	191	244	170	250	320	768	4030	9020	8020	1010	320	244
28	188	236	170	250	330	831	4740	8830	6940	1020	312	230
29	180	230	170	250	---	1010	4530	8070	6710	915	289	216
30	184	252	180	250	---	1230	4460	8040	6630	887	264	202
31	184	---	180	250	---	1610	---	8950	---	943	236	---
TOTAL	5572	5937	5373	6940	7810	17322	99790	200580	267530	92585	16162	6027
MEAN	180	198	173	224	279	559	3326	6470	8918	2987	521	201
MAX	322	256	217	250	330	1610	4740	10400	11500	6570	894	316
MIN	79	113	140	190	250	330	2180	3040	6630	887	236	128
AC-FT	11050	11780	10660	13770	15490	34360	197900	397900	530600	183600	32060	11950

CAL YR 1977 TOTAL 173994 MEAN 477 MAX 3180 MIN 22 AC-FT 345100
WTR YR 1978 TOTAL 731628 MEAN 2004 MAX 11500 MIN 79 AC-FT 1451000

09251000 YAMPA RIVER NEAR MAYBELL, CO--Continued
(National Stream-Quality Accounting Network Station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1950 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: November 1950 to August 1973, July 1975 to current year.
WATER TEMPERATURE: November 1950 to August 1973, July 1975 to current year.
SUSPENDED-SEDIMENT DISCHARGE: December 1950 to May 1958, October 1975 to September 1976, October 1977 to September 1978.

INSTRUMENTATION.--Water-quality monitor since July 1975.

REMARKS.--Daily maximum and minimum specific-conductance data available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 987 micromhos Dec. 9, 1976; minimum daily, 94 micromhos June 14, 1959.
WATER TEMPERATURES: Maximum, 33.0°C Aug. 29, 1976; minimum, freezing point on many days during winter months.
SEDIMENT CONCENTRATIONS: Maximum daily, 6,000 mg/L July 22, 1951; minimum daily, 1 mg/L several days during December 1975 to February 1976.
SEDIMENT LOADS: Maximum daily, 47,100 tons (42,700 t) May 9, 1958; minimum daily, 0.49 ton (0.44 t) Sept. 6, 1976.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 630 micromhos Sept. 8; minimum, 107 micromhos June 19, 29.
WATER TEMPERATURES: Maximum, 25.0°C Aug. 8, Sept. 5, 6; minimum not determined.
SEDIMENT CONCENTRATIONS: Maximum daily, 3,570 mg/L Sept. 8; minimum daily, 2 mg/L Jan. 14.
SEDIMENT LOADS: Maximum daily, 29,200 tons (26,500 t) May 17; minimum daily, 1.2 tons (1.1 t) Jan. 14.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	TURBIDITY (NTU)	OXYGEN, DISSOLVED (MG/L)	COLIFORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)
OCT										
11...	1330	260	420	8.2	10.0	--	--	11.0	--	--
NOV										
17...	1305	186	480	7.9	5.0	20	--	12.0	--	--
DEC										
15...	0940	272	440	7.8	3.0	15	--	9.3	58	<1
JAN										
25...	1355	248	400	7.8	1.0	5	--	12.4	--	--
FEB										
15...	1200	286	440	8.6	1.0	4	--	--	--	--
MAR										
21...	1530	442	580	8.9	11.5	40	--	--	--	--
APR										
18...	1005	4080	320	7.7	5.5	220	--	10.4	--	120
MAY										
12...	1130	3650	295	8.1	10.5	85	--	9.2	--	720
JUN										
29...	1100	7310	100	7.2	14.0	--	30	--	--	K350
JUL										
19...	1345	2740	125	7.6	20.0	--	9.1	7.6	--	--
AUG										
22...	1100	470	310	8.3	18.5	--	21	7.7	--	K19
SEP										
26...	1510	272	420	8.2	18.5	--	21	9.0	--	K16

K BASED ON NON-IDEAL COLONY COUNT.

09251000 YAMPA RIVER NEAR MAYBELL, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	STREP-TOCOCCI FECAL, (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)
OCT 11...	--	160	9	38	17	39	1.3	3.3	190	0
NOV 17...	--	170	10	40	18	46	1.5	2.5	200	0
DEC 15...	--	160	15	37	17	42	1.4	2.7	180	0
JAN 25...	--	170	17	41	17	43	1.4	2.5	190	0
FEB 15...	--	160	9	35	18	43	1.5	2.4	170	8
MAR 21...	--	200	34	40	24	54	1.7	2.5	170	15
APR 18...	140	130	50	33	12	15	.6	2.7	100	0
MAY 12...	1580	120	27	27	12	13	.5	1.9	110	0
JUN 29...	116	37	9	10	3.0	3.9	.3	.8	--	--
JUL 19...	33	49	4	13	3.9	6.1	.4	1.0	--	--
AUG 22...	330	110	11	28	10	20	.8	1.7	--	--
SEP 26...	K55	150	23	38	14	31	1.1	2.5	--	--

DATE	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)
OCT 11...	160	76	20	.3	4.4	297	292	.03	--	--
NOV 17...	160	79	21	.2	6.3	298	312	.01	--	--
DEC 15...	150	76	24	.2	5.8	286	294	.07	--	--
JAN 25...	160	80	14	.2	7.3	296	299	.06	1.3	1.3
FEB 15...	150	89	18	.2	5.1	459	303	.04	.72	.79
MAR 21...	160	130	20	.2	2.1	347	372	.01	8.8	8.8
APR 18...	82	66	3.8	.1	8.0	195	190	.05	1.4	1.5
MAY 12...	90	55	3.8	.1	10	176	177	.18	.77	.82
JUN 29...	28	8.1	1.2	.1	7.5	64	51	.00	.29	.29
JUL 19...	45	15	2.3	.1	7.9	76	76	.02	.41	.41
AUG 22...	100	42	9.2	.2	5.2	178	176	.01	.40	.42
SEP 26...	130	69	15	.2	3.0	270	251	.00	.51	.52

K BASED ON NON-IDEAL COLONY COUNT.

09251000 YAMPA RIVER NEAR MAYBELL, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C)	PHYTOPLANKTON, TOTAL (CELLS PER ML)	PERIPHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	PERIPHYTON BIOMASS ASH WEIGHT G/SQ M
OCT 11...	--	--	.12	--	--	--	--	11000	--	--
NOV 17...	.27	--	.06	.02	4.9	--	--	1300	--	--
DEC 15...	.33	--	.05	.04	--	--	1.8	--	--	--
JAN 25...	1.3	1.4	.04	.03	2.7	--	--	--	--	--
FEB 15...	.32	.83	.04	.02	4.2	--	--	--	--	--
MAR 21...	.10	8.8	1.6	.10	--	8.0	--	2200	--	--
APR 18...	.48	2.5	.53	.04	21	--	--	--	--	--
MAY 12...	.23	1.0	.19	.02	10	--	--	680	.315	.000
JUN 29...	.20	.29	.11	.02	6.2	--	--	1100	--	--
JUL 19...	.35	.43	.06	.00	4.8	--	--	--	--	--
AUG 22...	.45	.43	.04	.01	--	--	--	--	--	--
SEP 26...	.36	.52	.05	.01	--	4.8	.6	--	--	--

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)
DEC 15...	0940	2	2	100	100	1	0	0	0
MAR 21...	1530	--	1	100	0	2	1	10	10
SEP 26...	1510	1	2	0	100	2	2	0	0

DATE	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
DEC 15...	0	0	9	5	720	30	3	0	40
MAR 21...	4	0	4	2	1700	10	3	4	130
SEP 26...	0	0	4	1	890	50	10	5	50

DATE	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	SILVER, DISSOLVED (UG/L AS AG)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)
DEC 15...	0	.0	.0	0	0	0	0	140	10
MAR 21...	20	--	.0	1	0	--	2	10	0
SEP 26...	20	.0	.0	0	0	0	0	20	0

09251000 YAMPA RIVER NEAR MAYBELL, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				---	429	---	521	253	149	---	218	369
2				---	433	---	507	255	152	---	217	374
3				---	429	---	475	245	144	---	228	377
4				399	425	---	497	223	142	---	237	382
5				412	423	---	510	218	138	---	240	385
6				423	423	---	519	232	141	---	252	402
7				410	423	---	517	246	146	---	264	427
8				405	429	---	506	273	140	---	275	553
9				406	426	---	447	295	139	---	---	---
10				407	429	---	383	327	138	---	---	---
11				420	434	---	377	319	142	---	---	504
12				423	443	---	396	272	143	---	---	477
13				406	446	---	---	262	137	---	---	471
14				412	451	---	---	250	132	---	---	469
15				406	438	---	---	229	132	---	---	474
16				406	432	---	---	206	126	---	---	474
17				408	---	---	---	195	132	---	---	474
18				406	---	---	301	190	132	---	260	456
19				410	---	---	323	193	119	128	266	450
20				412	---	516	340	202	113	137	283	442
21				414	---	546	330	198	117	144	302	442
22				415	---	546	307	191	119	148	320	450
23				417	---	546	307	188	120	157	323	453
24				420	---	575	327	178	120	171	314	454
25				423	---	600	333	174	118	189	325	442
26				422	---	618	315	168	116	204	335	423
27				424	---	576	287	167	114	206	339	409
28				431	---	575	259	162	117	205	341	405
29				441	---	590	249	162	113	210	345	403
30				451	---	586	253	162	110	218	350	400
31				439	---	548	---	157	---	220	361	---

09251000 YAMPA RIVER NEAR MAYBELL, CO--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1											---	---
2											---	---
3											---	---
4											---	---
5											---	---
6											---	---
7											---	---
8											---	---
9											---	---
10											---	---
11											---	---
12											---	---
13											---	---
14											---	---
15											---	---
16											---	---
17											---	---
18											---	---
19											---	---
20											8.5	8.0
21											10.0	6.5
22											9.0	7.0
23											7.5	5.5
24											6.5	5.0
25											7.0	4.0
26											9.5	5.5
27											10.5	6.5
28											12.0	8.0
29											12.5	8.5
30											11.0	8.5
31											11.0	8.5

09251000 YAMPA RIVER NEAR MAYBELL, CO--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	9.5	7.5	10.0	8.0	11.0	9.0	---	---	22.0	19.5	21.5	16.5
2	7.5	6.0	10.5	7.5	11.5	9.5	---	---	22.0	18.0	22.5	16.0
3	7.0	6.0	11.0	9.5	11.5	10.5	---	---	23.0	19.0	24.0	17.5
4	7.5	5.0	9.5	7.0	12.0	10.0	---	---	23.0	19.5	24.5	18.0
5	7.5	6.0	6.5	6.0	11.0	9.5	---	---	23.0	19.0	25.0	18.5
6	8.0	6.0	6.5	5.0	11.0	8.5	---	---	23.0	20.0	25.0	18.5
7	9.5	7.0	5.5	4.5	12.5	10.0	---	---	24.0	20.0	23.5	17.5
8	11.0	8.5	7.0	4.5	12.5	11.0	---	---	25.0	20.5	20.5	15.0
9	9.5	7.0	9.0	5.5	13.5	11.0	---	---	---	---	20.5	16.0
10	7.5	6.5	11.0	7.5	13.5	12.0	---	---	---	---	20.5	16.5
11	8.5	5.5	11.0	9.0	13.5	12.5	---	---	---	---	17.5	13.5
12	9.5	6.5	10.0	9.0	13.5	12.5	---	---	---	---	18.0	12.5
13	---	---	12.0	8.0	13.5	12.5	---	---	---	---	16.0	11.0
14	---	---	13.5	10.0	14.0	13.0	---	---	---	---	17.0	11.0
15	---	---	13.0	11.5	14.0	12.5	---	---	---	---	18.5	12.5
16	---	---	12.0	10.5	14.5	13.5	---	---	---	---	19.5	13.5
17	---	---	11.0	8.0	14.5	13.5	---	---	---	---	18.5	13.5
18	7.0	6.0	8.0	6.5	14.0	13.0	---	---	18.5	15.0	13.5	9.0
19	8.0	5.0	8.5	6.5	14.5	13.0	20.5	19.5	19.5	15.0	9.5	7.5
20	9.5	6.5	11.5	8.0	15.0	13.5	21.0	18.5	20.5	17.0	10.0	7.0
21	8.5	6.5	11.5	9.5	15.0	13.0	21.0	18.5	21.0	17.5	13.5	6.5
22	7.0	5.5	10.5	9.5	15.5	13.5	21.5	18.0	20.5	18.5	15.0	8.0
23	8.0	5.5	10.5	9.5	15.5	14.0	22.0	18.5	21.0	17.0	17.0	10.5
24	10.0	6.5	10.5	9.5	16.0	14.5	22.5	18.5	20.0	17.0	18.0	12.0
25	12.0	9.0	10.5	9.5	16.0	15.0	23.0	19.0	21.5	17.0	18.5	13.5
26	12.5	9.5	9.5	8.5	15.5	14.0	24.0	19.5	22.5	17.5	18.5	13.5
27	11.0	9.0	10.0	9.0	15.0	13.5	24.0	20.0	22.5	17.5	18.5	13.5
28	8.5	7.5	10.0	8.5	15.0	14.0	23.0	21.0	22.5	17.5	18.5	13.5
29	9.0	7.0	11.5	9.0	15.0	14.0	23.0	20.5	23.0	17.5	18.5	13.0
30	8.5	7.5	11.5	10.5	14.5	13.5	24.5	20.0	22.5	17.5	18.5	12.5
31	---	---	11.5	10.0	---	---	22.5	20.5	21.0	17.0	---	---

09251000 YAMPA RIVER NEAR MAYBELL, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	86	37	8.6	202	18	9.8	188	24	12
2	81	59	13	256	12	8.3	212	26	15
3	79	51	11	226	10	6.1	217	15	8.8
4	82	95	21	222	12	7.2	196	8	4.2
5	88	42	10	230	16	9.9	200	12	6.5
6	99	84	22	205	19	11	190	9	4.6
7	146	195	77	233	16	10	180	7	3.4
8	162	580	254	236	24	15	170	7	3.2
9	241	1030	670	208	23	13	160	13	5.6
10	322	99	86	190	15	7.7	200	9	4.9
11	244	55	36	170	10	4.6	210	9	5.1
12	236	36	23	155	8	3.3	210	6	3.4
13	230	318	197	155	6	2.5	190	4	2.1
14	205	30	17	155	12	5.0	180	14	6.8
15	205	37	20	155	9	3.8	160	21	9.1
16	212	56	32	113	11	3.4	150	22	8.9
17	208	35	20	188	15	7.6	140	12	4.5
18	198	35	19	216	82	48	140	12	4.5
19	191	34	18	202	80	44	140	16	6.0
20	191	24	12	180	8	3.9	140	13	4.9
21	191	32	17	170	14	6.4	150	11	4.5
22	188	34	17	160	27	12	150	13	5.3
23	180	24	12	150	9	3.6	150	14	5.7
24	188	28	14	149	8	3.2	160	13	5.6
25	198	16	8.6	205	17	9.4	160	11	4.8
26	194	20	10	244	24	16	160	12	5.2
27	191	18	9.3	244	21	14	170	12	5.5
28	188	22	11	236	12	7.6	170	22	10
29	180	19	9.2	230	9	5.6	170	29	13
30	184	28	14	252	22	15	180	12	5.8
31	184	26	13	---	---	---	180	25	12
TOTAL	5572	---	1701.7	5937	---	316.9	5373	---	200.9

09251000 YAMPA RIVER NEAR MAYBELL, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JANUARY			FEBRUARY			MARCH	
1	190	12	6.2	250	6	4.1	330	8	7.1
2	190	14	7.2	250	7	4.7	335	9	8.1
3	190	14	7.2	250	5	3.4	340	16	15
4	200	9	4.9	250	5	3.4	350	---	16
5	200	8	4.3	250	7	4.7	360	27	26
6	200	10	5.4	250	8	5.4	370	15	15
7	200	8	4.3	250	5	3.4	370	19	19
8	200	6	3.2	250	8	5.4	410	18	20
9	210	8	4.5	250	7	4.7	395	18	19
10	210	11	6.2	260	8	5.6	395	20	21
11	210	8	4.5	270	11	8.0	405	20	22
12	220	8	4.8	280	8	6.0	405	---	16
13	220	8	4.8	280	7	5.3	405	14	15
14	220	2	1.2	280	10	7.6	405	12	13
15	220	4	2.4	290	14	11	410	17	19
16	230	4	2.5	290	7	5.5	410	17	19
17	230	4	2.5	290	7	5.5	415	16	18
18	230	4	2.5	290	8	6.3	420	20	23
19	230	10	6.2	290	9	7.0	425	19	22
20	230	12	7.5	290	8	6.3	430	8	9.3
21	240	16	10	290	5	3.9	442	21	25
22	240	14	9.1	290	8	6.3	588	31	49
23	240	15	9.7	290	6	4.7	726	66	129
24	240	11	7.1	300	7	5.7	775	82	172
25	250	12	8.1	310	8	6.7	803	83	180
26	250	6	4.1	320	9	7.8	754	84	171
27	250	7	4.7	320	9	7.8	768	49	102
28	250	7	4.7	330	9	8.0	831	54	121
29	250	6	4.1	---	---	---	1010	89	243
30	250	6	4.1	---	---	---	1230	190	631
31	250	5	3.4	---	---	---	1610	330	1430
TOTAL	6940	---	161.4	7810	---	164.2	17322	---	3595.5

09251000 YAMPA RIVER NEAR MAYBELL, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	2180	420	2470	4720	330	4210	8860	192	4590
2	3340	880	7940	4600	285	3540	8120	158	3460
3	3410	950	8750	4850	340	4450	8280	190	4250
4	3040	600	4920	5600	490	7410	8330	162	3640
5	2640	395	2820	5390	195	2840	8730	153	3610
6	2720	330	2420	4470	177	2140	8540	104	2400
7	2640	315	2250	3970	140	1500	7900	119	2540
8	3070	550	4560	3520	142	1350	8220	192	4260
9	3810	925	9520	3330	170	1530	8420	129	2930
10	3860	645	6720	3040	189	1550	9050	166	4060
11	2940	275	2180	3330	160	1440	9940	255	6840
12	2990	250	2020	3640	188	1850	10900	355	10400
13	3830	370	3830	3700	140	1400	11500	258	8010
14	3610	325	3170	4130	198	2210	10800	218	6360
15	3740	310	3130	5800	558	8740	10500	186	5270
16	3980	330	3550	7990	867	18700	10700	143	4130
17	4290	410	4750	9740	1110	29200	10600	168	4810
18	3610	460	4480	10400	820	23000	10700	149	4300
19	2750	190	1410	8280	455	10200	9840	137	3640
20	2640	155	1100	6440	450	7820	8970	159	3850
21	2970	175	1400	6500	415	7280	8630	190	4430
22	3360	255	2310	7350	369	7320	8150	93	2050
23	2800	320	2420	8020	361	7820	8250	106	2360
24	2320	230	1440	9230	483	12000	8360	107	2420
25	2400	245	1590	9750	463	12700	8510	99	2270
26	3090	180	1500	9880	456	12200	8430	102	2320
27	4030	460	5010	9020	289	7040	8020	112	2430
28	4740	800	10200	8830	231	5510	6940	244	4570
29	4530	363	4440	8070	172	3750	6710	232	4200
30	4460	280	3370	8040	193	4190	6630	194	3470
31	---	---	---	8950	220	5320	---	---	---
TOTAL	99790	---	115670	200580	---	220210	267530	---	123870

09251000 YAMPA RIVER NEAR MAYBELL, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JULY			AUGUST			SEPTEMBER	
1	6570	135	2390	894	19	46	226	13	7.9
2	6490	83	1450	852	14	32	219	12	7.1
3	5870	93	1470	845	9	21	222	13	7.8
4	5490	98	1450	775	18	38	205	20	11
5	5030	85	1150	698	17	32	194	18	9.4
6	4480	86	1040	663	---	30	161	8	3.5
7	4030	83	903	582	26	41	256	2280	3070
8	3740	82	828	552	11	16	316	3570	3640
9	3650	87	857	516	15	21	208	630	354
10	3440	133	1240	486	8	10	174	523	246
11	3330	113	1020	464	10	13	164	310	137
12	3310	113	1010	464	12	15	161	231	100
13	3920	109	1150	442	1360	1620	140	141	53
14	3420	62	573	474	1640	2100	143	108	42
15	2910	99	778	546	370	545	158	88	38
16	2630	65	462	726	190	372	149	70	28
17	2550	41	282	712	140	269	128	78	27
18	2900	42	329	635	71	122	149	114	46
19	2620	56	396	516	48	67	164	120	53
20	2230	58	349	458	65	80	188	107	54
21	2050	47	260	486	49	64	208	80	45
22	1860	25	156	415	33	37	226	91	56
23	1620	53	232	395	27	29	226	120	73
24	1380	---	150	400	40	43	226	95	58
25	1210	24	78	385	22	23	256	100	69
26	1080	25	73	360	21	20	268	65	47
27	1010	19	52	320	22	19	244	59	39
28	1020	15	41	312	71	60	230	52	32
29	915	24	59	289	36	28	216	47	27
30	887	17	41	264	16	11	202	50	27
31	943	19	48	236	17	11	---	---	---
TOTAL	92585	---	20317	16162	---	5835	6027	---	8407.7
YEAR	731628		500450.3						

09251000 YAMPA RIVER NEAR MAYBELL, CO--Continued

PHYTOPLANKTON DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	OCT 11,77	NOV 17,77	MAR 21,78	MAY 12,78	JUN 28,78	JUL 19,78
TIME	1330	1305	1530	1130	1100	1345
TOTAL CELLS/ML	11000	1300	2200	680	1100	4000
DIVERSITY: DIVISION	1.4	0.5	1.0	0.3	1.5	1.4
.CLASS	1.4	0.5	1.0	0.3	1.5	1.4
..ORDER	2.2	1.4	1.2	1.0	1.6	1.8
...FAMILY	2.9	2.0	2.4	3.2	2.8	3.3
....GENUS	3.0	2.1	2.4	3.3	3.1	3.9

ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHLOROPHYTA (GREEN ALGAE)												
.CHLOROPHYCEAE												
..CHLOROCOCCALES												
...MICRACTINIACEAE												
....GOLENKINIA	260	2	--	-	--	-	--	-	23	2	73	2
....MICRACTINIUM	--	-	--	-	--	-	--	-	--	-	580	15
...OOCYSTACEAE												
....ANKISTRODESMUS	410	4	22	2	--	-	--	-	120	11	510	13
....CHODATELLA	--	-	--	-	--	-	--	-	--	-	49	1
....DICTYOSPHAERIUM	--	-	--	-	--	-	--	-	--	-	440	11
....KIRCHNERIELLA	*	0	--	-	--	-	--	-	--	-	24	1
....OOCYSTIS	150	1	22	2	--	-	--	-	46	4	24	1
....SELENASTRUM	--	-	36	3	--	-	--	-	--	-	--	-
....TETRAEDRON	*	0	--	-	--	-	--	-	--	-	--	-
...SCENEDESMACEAE												
....SCENEDESMUS	2600#	23	350#	27	--	-	--	-	46	4	290	7
....TETRASTRUM	--	-	--	-	--	-	--	-	--	-	97	2
..VOLVOCALES												
...CHLAMYDOMONADACEAE												
....CHLAMYDOMONAS	*	0	7	1	--	-	14	2	--	-	49	1
..ZYGNEMATALES												
...ZYGNEMATACEAE												
....MOUGEOTIA	2700#	24	--	-	--	-	--	-	--	-	--	-
....SPIROGYRA	--	-	700#	54	--	-	--	-	--	-	--	-
CHRYSOPHYTA												
.BACILLARIOPHYCEAE												
..CENTRALES												
...COSCINODISCACEAE												
....CYCLOTELLA	410	4	--	-	120	6	120#	18	23	2	510	13
..PENNALES												
...ACHNANTHACEAE												
....ACHNANTHES	--	-	--	-	--	-	--	-	69	6	--	-
....COCCONEIS	*	0	22	2	--	-	--	-	23	2	24	1
...CYMBELLACEAE												
....AMPHORA	*	0	--	-	--	-	--	-	--	-	--	-
....CYMBELLA	--	-	--	-	--	-	--	-	69	6	120	3
....EPITHEMIA	*	0	29	2	--	-	55	8	--	-	--	-
...DIATOMACEAE												
....DIATOMA	--	-	29	2	160	8	55	8	--	-	24	1
...FRAGILARIACEAE												
....HANNAEA	--	-	--	-	--	-	27	4	--	-	49	1
....SYNEDRA	360	3	--	-	--	-	68	10	23	2	73	2
...GOMPHONEMATACEAE												
....GOMPHONEMA	--	-	22	2	41	2	41	6	--	-	49	1
...MERIDIONACEAE												
....MERIDION	--	-	--	-	--	-	27	4	--	-	--	-
...NAVICULACEAE												
....GYROSIGMA	--	-	--	-	--	-	--	-	--	-	24	1
....NAVICULA	410	4	22	2	110	5	120#	18	120	11	220	5
....PINNULARIA	--	-	--	-	--	-	--	-	23	2	--	-
...NITZSCHIACEAE												
....NITZSCHIA	1800#	16	36	3	240	11	96	14	190#	17	220	5
...SURIRELLACEAE												
....SURIRELLA	--	-	--	-	--	-	41	6	--	-	49	1
...TABELLARIACEAE												
....TABELLARIA	--	-	--	-	200	9	--	-	--	-	--	-

09251000 YAMPA RIVER NEAR MAYBELL, CO--Continued

PHYTOPLANKTON DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CYANOPHYTA (BLUE-GREEN ALGAE)												
.CYANOPHYCEAE												
..HORMOGONALES												
...NOSTOCACEAE												
....ANABAENA	1000#	16	--	-	--	-	--	-	--	-	360	9
....CYLINDROSPERMUM	--	-	--	-	290	13	--	-	--	-	--	-
...OSCILLATORIACEAE												
....OSCILLATORIA	--	-	--	-	980#	46	--	-	320#	30	120	3
...RIVULARIACEAE												
....RAPHIDIOPSIS	--	-	--	-	--	-	14	2	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)												
.EUGLENOPHYCEAE												
..EUGLENALES												
...EUGLENACEAE												
....EUGLENA	*	0	--	-	--	-	--	-	--	-	--	-
....TRACHELOMONAS	--	-	--	-	--	-	--	-	--	-	24	1

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

09253000 LITTLE SNAKE RIVER NEAR SLATER, CO

LOCATION.--Lat 40°59'58", long 107°08'34", in SW¼NW¼ sec.15, T.12 N., R.87 W., Routt County, Hydrologic Unit 14050003, on left bank just downstream from highway bridge at Focus Ranch, 0.2 mi (0.3 km) downstream from Spring Creek, and 12 mi (19 km) east of Slater.

DRAINAGE AREA.--285 mi² (738 km²).

PERIOD OF RECORD.--October 1942 to September 1947, October 1950 to current year.

REVISED RECORDS.--WSP 1733: 1960.

GAGE.--Water-stage recorder. Datum of gage is 6,831.00 ft (2,082.089 m), National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter period, which are fair. Diversions for irrigation of about 2,000 acres (8.09 km²) above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--33 years, 226 ft³/s (6.400 m³/s), 163,700 acre-ft/yr (202 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,180 ft³/s (118 m³/s) Apr. 25, 1974, gage height, 8.95 ft (2.728 m), from recorded range in stage; minimum daily, 8.6 ft³/s (0.24 m³/s) Sept. 10, 1944.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,600 ft³/s (45 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
May 16	2100	2,340	66.3	7.42	2.262	June 11	2130	*2,490	70.5	7.57	2.307
May 24	2300	2,380	67.4	7.46	2.274						

Minimum daily discharge, 18.0 ft³/s (0.51 m³/s) Sept. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	30	40	33	29	34	171	674	1620	855	80	21
2	23	30	39	33	30	34	177	764	1630	771	85	21
3	22	31	38	33	31	34	157	904	1660	708	74	19
4	22	32	38	31	32	34	133	771	1640	632	66	19
5	21	35	37	30	33	34	131	578	1740	566	61	19
6	24	37	37	30	34	35	122	485	1650	515	57	19
7	60	33	36	30	34	36	148	430	1730	465	56	18
8	42	30	36	30	35	36	206	380	1760	435	51	25
9	30	24	36	30	36	37	258	355	1950	400	44	24
10	28	22	35	30	36	37	217	455	2380	375	36	21
11	22	25	35	30	36	37	204	545	2400	375	34	26
12	22	30	34	30	36	38	244	578	2180	366	33	41
13	26	30	34	30	36	39	237	736	2110	284	38	34
14	28	29	34	30	36	40	251	1140	2180	249	60	30
15	26	28	33	30	36	41	288	1550	2150	228	81	27
16	24	28	33	31	36	42	301	1900	2130	213	54	25
17	25	27	33	31	36	43	301	1810	1920	209	37	25
18	23	28	32	31	36	44	240	1300	1690	198	35	40
19	23	62	31	32	36	45	234	1120	1620	169	43	40
20	24	60	31	33	35	46	301	1190	1480	157	37	38
21	25	56	31	33	35	48	355	1360	1410	140	33	35
22	28	52	30	33	35	49	265	1630	1410	128	31	39
23	27	49	30	34	35	50	227	1860	1420	112	30	38
24	25	46	30	34	35	52	251	2020	1410	101	28	33
25	26	45	30	35	35	55	400	1930	1430	93	26	30
26	25	43	30	34	35	58	578	1760	1250	92	27	27
27	26	43	30	32	35	68	668	1690	1090	91	26	26
28	25	42	32	30	35	78	584	1550	1020	85	24	25
29	25	41	33	30	---	84	578	1640	967	90	23	23
30	34	40	33	29	---	101	662	1850	932	101	23	23
31	37	---	33	29	---	125	---	1680	---	87	22	---
TOTAL	841	1108	1044	971	969	1534	8891	36635	50159	9290	1355	831
MEAN	27.1	36.9	33.7	31.3	34.6	49.5	296	1182	1672	300	43.7	27.7
MAX	60	62	40	35	36	125	668	2020	2400	855	85	41
MIN	21	22	30	29	29	34	122	355	932	85	22	18
AC-FT	1670	2200	2070	1930	1920	3040	17640	72670	99490	18430	2690	1650

CAL YR 1977 TOTAL 32346.0 MEAN 88.6 MAX 643 MIN 9.0 AC-FT 64160
WTR YR 1978 TOTAL 113628.0 MEAN 311 MAX 2400 MIN 18 AC-FT 225400

09255000 SLATER FORK NEAR SLATER, CO

LOCATION.--Lat 40°58'57", long 107°22'56", in SW¼NE¼ sec.21, T.12 N., R.89 W., Moffat County, Hydrologic Unit 14050003, on right bank 15 ft (5 m) downstream from highway bridge, 1.0 mi (1.6 km) upstream from mouth, and 1.5 mi (2.4 km) south of Slater.

DRAINAGE AREA.--161 mi² (417 km²).

PERIOD OF RECORD.--May to October, December 1910, March to October 1911, and April to May 1912 (published as Slater Creek), July 1931 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 618: 1910-11. WSP 764: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 6,600 ft (2,012 m), from river-profile map. May 28, 1910, to May 25, 1912, nonrecording gage at site 1.5 mi (2.4 km) upstream at different datum. July 9, 1931, to May 6, 1932, nonrecording gage at site 0.2 mi (0.3 km) downstream at different datum.

REMARKS.--Records good except those for winter period, which are fair. Diversions for irrigation of about 500 acres (2.02 km²) above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--47 years (water years 1932-78), 73.1 ft³/s (2.070 m³/s), 52,960 acre-ft/yr (65.3 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,860 ft³/s (52.7 m³/s) May 8, 1974, gage height, 19.75 ft (3.277 m), from peak indicator; no flow Aug. 2-10, 1934, Aug. 18, 25-27, 1936, Aug. 29 to Sept. 3, 1954, Aug. 3, 4, 15, 16, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 430 ft³/s (12 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
May 17	1100	698	19.8	8.68	2.646	June 11	0400	*718	20.3	8.75	2.667
May 24	0300	700	19.8	8.69	2.649						

Minimum daily discharges, 3.8 ft³/s (0.11 m³/s) Sept. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	14	12	11	10	17	128	184	374	210	14	4.1
2	11	13	12	11	10	17	109	209	386	194	15	4.0
3	12	15	12	11	10	18	90	263	399	176	13	3.9
4	12	14	12	12	11	18	74	244	476	156	11	3.9
5	11	14	12	12	11	19	82	187	429	139	9.8	3.8
6	15	14	12	12	12	19	72	153	392	126	8.0	3.9
7	27	14	12	12	13	20	91	128	425	119	7.4	5.3
8	21	14	12	12	14	21	116	113	398	113	6.5	11
9	15	6.1	12	12	15	21	124	105	441	102	6.2	11
10	13	10	12	12	17	21	93	144	570	97	6.1	7.6
11	12	17	12	12	17	21	88	183	594	93	5.9	8.0
12	11	15	12	12	17	21	110	185	480	114	6.0	12
13	12	12	12	12	17	21	101	195	467	83	6.8	11
14	12	14	12	12	17	21	100	326	503	71	9.8	10
15	12	14	12	12	16	22	110	512	488	61	14	9.6
16	12	13	12	12	16	22	110	656	486	61	12	8.4
17	12	10	12	12	16	23	112	634	428	58	8.2	8.3
18	12	14	12	12	16	24	83	407	351	53	6.8	15
19	11	13	12	12	16	25	80	318	344	44	7.1	17
20	11	12	12	12	16	27	92	371	321	38	7.4	18
21	12	12	12	11	16	28	114	449	303	35	6.8	18
22	14	12	12	11	16	28	91	480	317	31	6.0	21
23	14	12	12	11	16	29	80	590	318	27	5.6	20
24	13	12	12	10	16	29	75	606	323	27	5.5	18
25	12	12	12	10	16	30	114	554	339	29	5.2	16
26	12	12	12	10	16	32	161	476	281	27	5.0	15
27	12	12	12	10	17	37	207	470	233	22	4.8	15
28	12	12	12	10	17	43	189	396	220	16	4.6	14
29	12	12	12	10	---	52	166	437	231	16	4.5	14
30	16	12	12	10	---	60	176	518	233	19	4.9	14
31	17	---	12	10	---	84	---	426	---	17	4.2	---
TOTAL	411	382.1	372	350	417	870	3338	10919	11548	2374	238.1	340.8
MEAN	13.3	12.7	12.0	11.3	14.9	28.1	111	352	385	76.6	7.68	11.4
MAX	27	17	12	12	17	84	207	656	594	210	15	21
MIN	11	6.1	12	10	10	17	72	105	220	16	4.2	3.8
AC-FT	815	758	738	694	827	1730	6620	21660	22910	4710	472	676

CAL YR 1977 TOTAL 7708.38 MEAN 21.1 MAX 155 MIN .00 AC-FT 15290
WTR YR 1978 TOTAL 31560.00 MEAN 86.5 MAX 656 MIN 3.8 AC-FT 62600

09258000 WILLOW CREEK NEAR DIXON, WY

LOCATION.--Lat 40°54'56", long 107°31'16", on line between secs.8 and 17, T.11 N., R.90 W., Moffat County, Colo., Hydrologic unit 14050003, on right bank 6.2 mi (10.0 km) south of Colorado-Wyoming State line, 8.0 mi (12.9 km) upstream from mouth, and 8.3 mi (13.4 km) south of Dixon.

DRAINAGE AREA.--24 mi² (62 km²), approximately.

PERIOD OF RECORD.--October 1953 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,700 ft (2,042 m), from topographic map.

REMARKS.--Records good except those for winter period, which are fair. One small ditch diverts water above station for irrigation. Regulation by Elk Lake, capacity, 400 acre-ft (493,000 m³). Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--25 years, 9.54 ft³/s (0.270 m³/s), 6,910 acre-ft/yr (8.52 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 319 ft³/s (9.03 m³/s) Apr. 25, 1974, gage height, 5.42 ft (1.652 m), from rating curve extended above 160 ft³/s (4.5 m³/s); no flow Sept. 17-19, 1955, many days July through September 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 70 ft³/s (2.0 m³/s); and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
March 31	1900	103	2.92	3.91	1.192	June 15	2400	*109	3.09	3.96	1.207

Minimum daily discharge, 0.02 ft³/s (0.001 m³/s) Oct. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.50	.93	1.3	1.2	1.4	1.7	66	18	25	52	9.7	2.2
2	.35	.90	1.2	1.1	1.4	1.8	37	18	28	51	8.7	1.5
3	.33	1.2	1.2	1.1	1.4	1.8	26	21	32	51	8.1	1.4
4	1.1	1.1	1.2	1.1	1.4	1.9	24	20	36	46	7.7	1.3
5	1.8	1.1	1.2	1.1	1.4	2.0	25	18	33	38	7.6	1.2
6	.45	1.2	1.2	1.1	1.4	2.1	22	16	31	32	7.2	1.4
7	3.6	1.2	1.2	1.2	1.4	2.2	40	15	34	29	7.1	1.7
8	.88	1.0	1.3	1.2	1.3	2.3	48	14	36	28	6.7	5.3
9	.21	.39	1.3	1.2	1.3	2.4	32	30	46	26	6.7	2.0
10	.09	.82	1.3	1.3	1.3	2.5	18	27	71	27	6.1	1.4
11	.02	1.1	1.3	1.3	1.3	2.6	24	22	84	29	5.9	2.1
12	1.5	1.2	1.3	1.3	1.3	2.6	26	18	67	30	5.8	2.4
13	2.5	1.0	1.3	1.3	1.3	2.6	18	17	62	21	6.5	2.2
14	2.5	1.4	1.3	1.3	1.3	2.7	22	26	76	19	9.9	2.0
15	2.5	1.4	1.3	1.3	1.3	2.9	22	37	78	17	9.3	1.7
16	2.5	1.0	1.3	1.3	1.3	3.0	24	41	90	16	7.2	1.4
17	2.5	.92	1.3	1.3	1.3	3.0	21	37	79	14	5.9	.50
18	2.5	1.7	1.3	1.3	1.4	3.0	12	31	60	11	6.1	2.4
19	2.3	1.1	1.3	1.3	1.4	3.0	10	25	58	9.5	6.7	2.0
20	2.4	.78	1.2	1.3	1.4	3.1	13	22	54	9.6	5.6	1.9
21	2.8	1.5	1.1	1.3	1.4	3.2	15	21	56	10	5.4	1.3
22	3.4	1.5	1.1	1.3	1.5	3.5	10	21	69	9.3	5.1	2.0
23	2.9	1.5	1.0	1.4	1.5	4.0	7.7	27	77	8.1	4.8	2.5
24	2.7	1.4	1.0	1.4	1.5	4.5	6.2	34	83	7.4	4.4	1.7
25	1.8	1.4	1.0	1.4	1.6	5.4	12	30	94	6.7	4.0	1.2
26	.90	1.4	1.0	1.4	1.6	6.0	18	28	71	6.3	2.9	.50
27	.85	1.3	1.1	1.4	1.7	8.0	23	27	57	5.8	2.2	.34
28	.83	1.3	1.1	1.4	1.7	10	16	22	55	6.8	2.2	.42
29	.78	1.3	1.2	1.4	---	15	16	25	56	11	2.1	.40
30	1.5	1.3	1.2	1.4	---	24	18	33	56	10	2.0	.41
31	1.5	---	1.2	1.4	---	45	---	28	---	9.0	2.1	---
TOTAL	50.49	35.34	37.3	39.8	39.5	177.8	673.9	769	1754	646.5	181.7	48.77
MEAN	1.63	1.18	1.20	1.28	1.41	5.74	22.5	24.8	58.5	20.9	5.86	1.63
MAX	3.6	1.7	1.3	1.4	1.7	45	66	41	94	52	9.9	5.3
MIN	.02	.39	1.0	1.1	1.3	1.7	6.2	14	25	5.8	2.0	.34
AC-FT	100	70	74	79	78	353	1340	1530	3480	1280	360	97

CAL YR 1977 TOTAL 897.61 MEAN 2.46 MAX 13 MIN .00 AC-FT 1780
WTR YR 1978 TOTAL 4454.10 MEAN 12.2 MAX 94 MIN .02 AC-FT 8830

09260000 LITTLE SNAKE RIVER NEAR LILY, CO

LOCATION.--Lat 40°32'50", long 108°25'25", in NW¼NE¼ sec.20, T.7 N., R.98 W., Moffat County, Hydrologic unit 14050003, on left bank 170 ft (52 m) downstream from highway bridge, 6.0 mi (9.7 km) north of Lily, and 10 mi (16 km) upstream from mouth.

DRAINAGE AREA.--3,730 mi² (9,660 km²), approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June to August 1904 (published as "near Maybell"), October 1921 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1713: 1959.

GAGE.--Water-stage recorder. Altitude of gage is 5,685 ft (1,733 m), from river-profile map. June 9 to Aug. 14, 1904, nonrecording gage, and May 5, 1922, to Nov. 30, 1935, water-stage recorder, at site 300 ft (91 m) upstream at different datums.

REMARKS.--Records good except those for winter period, which are fair. Diversions for irrigation of about 21,000 acres (85.0 km²) above station.

AVERAGE DISCHARGE.--57 years, 569 ft³/s (16.11 m³/s), 412,200 acre-ft/yr (508 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,200 ft³/s (402 m³/s) May 27, 1926, gage height, 10.5 ft (3.20 m), site and datum then in use, from rating curve extended above 3,600 ft³/s (100 m³/s); maximum gage height, 11.1 ft (3.38 m), Feb. 13, 1962, from floodmark (backwater from ice); no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,240 ft³/s (148 m³/s) at 1600 May 18, gage height, 5.95 ft (1.814 m), only peak above base of 3,500 ft³/s (99 m³/s); minimum daily, 0.54 ft³/s (0.015 m³/s) Oct. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	40	96	160	110	400	588	1420	3370	1790	72	13
2	1.1	41	100	160	110	450	835	1600	3040	1710	86	8.2
3	.82	41	106	155	110	900	1310	1620	3000	1560	109	8.8
4	.54	43	110	155	110	600	1120	1860	3000	1450	107	8.8
5	.68	44	114	160	115	700	937	2080	3440	1290	82	8.8
6	1.1	44	116	140	115	800	748	1790	3650	1180	72	8.8
7	2.9	43	118	130	110	850	756	1520	3400	1030	49	47
8	2.5	40	118	135	110	899	641	1480	3370	899	39	242
9	1.8	39	120	135	110	543	773	1380	3400	808	33	16
10	5.5	39	126	135	115	480	918	1230	3440	731	29	16
11	27	37	130	135	120	480	966	1130	3920	673	22	18
12	58	38	136	140	115	366	748	1320	4670	633	18	20
13	45	38	138	145	110	348	689	1550	4650	573	17	17
14	35	38	140	145	115	338	773	1600	3970	625	68	17
15	40	38	145	140	117	350	705	2100	3890	558	94	17
16	26	38	140	120	120	360	722	3100	3940	462	44	17
17	21	38	130	110	120	390	808	4100	3950	405	107	20
18	18	42	140	100	130	410	739	4950	3750	366	121	69
19	17	19	160	90	130	430	871	3840	3280	357	128	123
20	16	35	160	80	140	450	697	3000	2900	339	105	90
21	17	27	160	70	150	494	641	2940	2720	310	82	164
22	24	42	150	70	160	565	697	3150	2500	280	68	123
23	26	44	150	70	170	529	880	3210	2440	250	51	123
24	27	53	140	60	180	595	739	3850	2440	230	160	112
25	28	70	145	64	190	853	665	4180	2460	215	153	107
26	29	96	148	70	200	588	610	4290	2490	191	94	119
27	30	107	145	80	300	420	853	3720	2430	148	62	82
28	32	107	150	90	400	366	1330	3530	2110	109	40	135
29	34	60	153	90	---	380	1560	3160	1860	103	32	125
30	36	90	153	100	---	438	1410	3050	1790	103	30	145
31	38	---	151	100	---	494	---	3420	---	80	13	---
TOTAL	642.14	1471	4188	3534	4082	15866	25729	81170	95270	19458	2187	2020.4
MEAN	20.7	49.0	135	114	146	512	858	2618	3176	628	70.5	67.3
MAX	58	107	160	160	400	899	1560	4950	4670	1790	160	242
MIN	.54	19	96	60	110	338	588	1130	1790	80	13	8.2
AC-FT	1270	2920	8310	7010	8100	31470	51030	161000	189000	38590	4340	4010

CAL YR 1977 TOTAL 52876.69 MEAN 145 MAX 1360 MIN .16 AC-FT 104900
WTR YR 1978 TOTAL 255617.54 MEAN 700 MAX 4950 MIN .54 AC-FT 507000

09260000 LITTLE SNAKE RIVER NEAR LILY, CO--Continued
(National Stream-Quality Accounting Network Station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--September 1969 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: July 1975 to current year.
WATER TEMPERATURES: July 1975 to current year.

INSTRUMENTATION:--Water-quality monitor since July 1975.

EXTREMES FOR PERIOD OF RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 2,020 micromhos Oct. 11, 1977; minimum, 122 micromhos June 20, 1978.
WATER TEMPERATURES: Maximum, 31.0°C Aug. 8, 9, 1978; minimum, freezing point on many days during winter months each year.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 2,020 micromhos Oct. 11; minimum, 122 micromhos June 20.
WATER TEMPERATURES: Maximum, 31.0°C Aug. 8, 9; minimum, 0.0°C Oct. 11, 12.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)
OCT										
11...	0930	28	1850	8.4	.5	--	--	11.0	--	--
NOV										
17...	1030	38	740	7.5	1.5	330	--	10.7	--	--
DEC										
15...	1200	144	560	7.7	2.0	290	--	8.9	K200	K5
JAN										
25...	1040	64	500	7.5	1.0	50	--	10.8	--	--
FEB										
15...	1415	116	480	7.9	1.0	60	--	10.8	--	--
MAR										
21...	1100	494	600	8.0	9.0	5000	--	--	--	--
APR										
19...	1100	880	370	8.1	7.0	380	--	4.7	--	30
MAY										
22...	1345	3340	200	8.3	14.0	570	--	8.2	--	--
JUN										
08...	1400	3350	195	8.0	6.0	130	--	8.4	--	130
JUL										
25...	1230	340	425	7.7	22.0	--	18	6.6	--	K27
AUG										
23...	1100	58	700	8.3	19.0	--	120	--	--	1200
SEP										
27...	1230	79	700	8.1	15.0	--	35	8.5	--	200

K BASED ON NON-IDEAL COLONY COUNT.

09260000 LITTLE SNAKE RIVER NEAR LILY, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	STREP-TOCOCCI FECAL, (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)
OCT 11...	--	270	25	69	24	380	10	4.9	300	0
NOV 17...	--	210	6	54	18	100	3.0	2.1	250	0
DEC 15...	--	180	10	50	14	69	2.2	3.1	210	0
JAN 25...	--	190	10	53	14	62	2.0	1.8	220	0
FEB 15...	--	160	6	45	12	54	1.8	1.6	195	0
MAR 21...	--	82	--	24	5.4	120	5.8	2.0	140	--
APR 19...	120	150	32	39	12	24	.9	1.2	140	0
MAY 22...	--	75	3	22	4.9	13	.7	.6	88	0
JUN 08...	--	63	5	18	4.5	8.7	.5	.6	71	0
JUL 25...	85	140	5	38	9.8	42	1.6	3.0	--	--
AUG 23...	63	190	6	53	13	87	2.8	4.1	--	0
SEP 27...	120	170	0	48	12	93	3.1	3.1	--	--

DATE	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)
OCT 11...	250	610	170	.7	8.4	1390	1410	.02	--	--
NOV 17...	210	190	31	.4	13	486	532	.05	--	--
DEC 15...	170	110	23	.3	14	360	388	.17	--	--
JAN 25...	180	120	15	.2	17	396	391	.01	1.1	1.1
FEB 15...	160	93	18	.3	15	321	333	.04	.42	.46
MAR 21...	--	120	42	.5	9.5	390	--	.44	8.9	8.9
APR 19...	110	66	6.8	.2	13	227	231	.17	2.1	2.1
MAY 22...	72	28	2.7	.1	12	127	127	.08	1.6	1.6
JUN 08...	58	27	2.5	.1	12	96	108	.03	.64	.67
JUL 25...	130	75	12	.2	14	272	272	.01	.77	.77
AUG 23...	180	140	29	.3	10	455	445	.00	1.6	1.6
SEP 27...	190	140	30	.5	9.0	442	450	.02	.99	1.0

09260000 LITTLE SNAKE RIVER NEAR LILY, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	PHYTO-PLANK-TON, TOTAL (CELLS PER ML)	PERI-PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	PERI-PHYTON BIOMASS ASH WEIGHT G/SQ M
OCT										
11...	--	--	.63	--	--	--	--	28000	--	--
NOV										
17...	.22	--	.46	.01	7.0	--	--	61	--	--
DEC										
15...	.37	--	.47	.03	--	--	--	--	--	--
JAN										
25...	1.2	1.1	.09	.02	3.1	--	--	--	--	--
FEB										
15...	.22	.50	.11	.01	2.1	--	--	--	--	--
MAR										
21...	.50	9.3	4.5	.19	46	13	>31	2500	--	--
APR										
19...	.53	2.3	.46	.01	14	--	--	--	--	--
MAY										
22...	.41	1.7	1.0	.04	23	--	--	120	.472	.236
JUN										
08...	.17	.70	.26	.01	9.2	--	--	67	--	--
JUL										
25...	.65	.78	.06	.01	4.2	--	--	--	--	--
AUG										
23...	.29	1.6	.21	.02	6.2	--	--	--	--	--
SEP										
27...	.24	1.0	.48	.01	--	4.5	3.7	--	--	--

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	783	548		551	---	574	270	---	167	---	
2	---	802	617		547	---	563	267	---	174	---	
3	---	800	611		536	---	567	264	---	177	---	
4	---	790	560		521	---	489	261	---	181	---	
5	---	801	507		514	---	470	258	---	184	---	
6	---	781	520		505	---	494	255	---	178	---	
7	---	767	546		488	---	526	252	---	---	---	
8	---	732	729		470	---	520	251	---	---	720	
9	---	747	807		467	498	502	262	---	---	746	
10	---	808	816		467	532	475	269	---	---	751	
11	1980	762	766		463	565	429	256	---	---	766	
12	1540	786	691		452	582	412	237	---	---	793	
13	1210	761	659		462	610	426	233	151	294	---	
14	1050	738	628		470	593	432	230	146	303	---	
15	996	737	563		481	564	407	227	141	313	---	
16	1030	733	390		495	565	394	224	138	324	---	
17	1080	---	---		562	590	393	221	136	351	---	
18	1090	612	437		627	619	385	218	135	376	---	
19	1090	604	456		644	643	378	215	136	391	---	
20	1080	635	490		618	656	375	212	---	---	---	
21	1080	728	532		600	---	379	209	---	---	---	
22	1060	758	561		587	556	376	206	---	---	---	
23	1040	751	571		549	538	356	---	---	---	---	
24	1010	718	548		521	543	321	---	---	---	---	
25	948	672	---		493	663	322	---	---	443	---	
26	999	679	---		479	627	336	---	144	430	---	
27	982	644	---		---	588	341	---	143	442	---	
28	948	637	---		---	619	299	---	149	---	---	
29	851	596	---		---	637	276	---	157	---	---	
30	829	561	---		---	628	273	---	163	---	---	
31	798	---	---		---	618	---	---	---	---	---	

09260000 LITTLE SNAKE RIVER NEAR LILY, CO--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	6.5	1.0	1.5	1.5	1.0	1.0	1.0	1.0	1.5	1.0
2	---	---	9.5	1.0	1.5	1.5	1.0	1.0	1.0	1.0	1.5	1.0
3	---	---	11.5	1.0	4.5	1.5	1.0	1.0	1.0	1.0	1.5	1.0
4	---	---	12.0	2.5	5.0	1.5	1.0	1.0	1.0	1.0	1.5	1.0
5	---	---	9.5	2.5	4.5	1.5	1.0	1.0	1.0	1.0	1.5	1.0
6	---	---	9.0	4.5	1.5	1.5	1.0	1.0	1.0	1.0	1.5	1.0
7	---	---	13.0	2.5	1.5	1.5	1.0	1.0	1.0	1.0	2.0	1.0
8	---	---	4.0	1.0	1.5	1.5	1.0	1.0	1.0	1.0	1.5	1.0
9	---	---	1.5	1.0	1.5	1.5	1.0	1.0	1.0	1.0	5.0	1.0
10	---	---	1.5	1.0	1.5	1.5	1.0	1.0	1.5	1.0	5.5	2.0
11	13.5	.0	1.5	1.5	1.5	1.5	1.0	1.0	1.5	1.5	6.0	1.5
12	13.0	.0	7.0	1.5	1.5	1.5	1.0	1.0	1.5	1.5	7.0	2.5
13	16.0	.5	4.5	1.5	1.5	1.5	1.0	1.0	1.5	1.5	5.0	2.5
14	18.0	2.0	5.0	1.0	1.5	1.5	1.0	1.0	1.5	1.5	6.0	1.0
15	19.5	3.5	7.5	1.5	2.5	1.5	1.0	1.0	1.5	1.5	3.5	1.0
16	17.0	3.0	8.5	1.5	1.5	1.5	1.0	1.0	1.5	1.5	6.0	1.0
17	18.0	3.0	6.0	1.5	1.5	1.5	1.0	1.0	1.5	1.5	9.5	1.0
18	17.5	2.5	6.5	2.5	1.5	1.5	1.0	1.0	1.5	1.5	12.5	2.5
19	15.5	2.0	4.0	1.5	1.5	1.5	1.0	1.0	1.5	1.5	13.0	4.0
20	15.5	3.5	2.0	1.5	1.5	1.5	1.0	1.0	1.5	1.0	12.0	5.0
21	15.5	7.0	2.0	1.5	1.5	1.5	1.0	1.0	1.5	1.0	12.5	4.5
22	17.0	3.0	1.5	1.5	1.5	1.5	1.0	1.0	1.5	1.0	8.5	6.5
23	15.0	2.0	1.5	1.5	1.5	1.5	1.0	1.0	1.5	1.0	11.5	6.0
24	13.0	2.0	1.5	1.5	1.5	1.5	1.0	1.0	1.0	1.0	11.5	6.0
25	15.0	1.5	2.0	1.5	1.5	1.5	1.0	1.0	1.5	1.0	10.0	4.0
26	14.5	2.5	2.5	1.5	1.5	1.0	1.0	1.0	1.5	1.0	12.5	4.5
27	14.5	2.0	2.0	1.5	1.5	1.0	1.0	1.0	1.5	1.0	15.5	6.0
28	15.0	3.0	2.0	1.5	1.5	1.5	1.0	1.0	1.5	1.0	17.0	7.0
29	12.0	5.0	1.5	1.5	1.5	1.5	1.0	1.0	---	---	17.5	7.5
30	13.5	5.0	1.5	1.5	1.5	1.5	1.0	1.0	---	---	16.0	8.0
31	5.0	1.0	---	---	1.0	1.0	1.0	1.0	---	---	10.5	8.5

09260000 LITTLE SNAKE RIVER NEAR LILY, CO--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	13.5	9.0	14.5	8.5	16.0	11.0	22.0	16.5	---	---	24.5	9.5
2	11.5	7.5	14.5	8.0	16.0	12.0	21.0	16.5	---	---	24.0	9.5
3	11.5	7.5	15.0	10.5	15.5	12.5	19.5	15.5	---	---	24.5	13.0
4	12.0	7.0	10.5	5.5	15.5	12.5	20.5	14.5	---	---	24.5	12.0
5	11.5	7.5	7.5	4.5	14.5	12.5	22.0	15.0	---	---	20.0	12.5
6	14.0	7.5	6.0	5.0	15.5	11.5	20.5	16.0	---	---	27.0	12.5
7	13.5	8.0	8.0	4.5	15.0	12.0	---	---	---	---	27.0	10.5
8	16.5	8.5	8.5	4.5	15.5	12.5	---	---	31.0	18.0	20.0	12.5
9	12.5	8.0	12.5	4.5	---	---	---	---	31.0	14.5	25.0	12.0
10	12.0	6.0	13.5	7.0	---	---	---	---	29.5	15.0	20.0	11.5
11	15.0	7.5	13.0	9.0	18.0	13.5	---	---	26.5	14.5	17.0	8.0
12	15.0	6.5	14.0	5.5	17.0	13.5	---	---	27.0	15.0	20.5	5.5
13	10.5	7.5	18.0	8.0	15.5	13.0	25.0	19.5	24.0	15.0	22.0	6.0
14	15.5	7.0	17.5	11.0	17.0	13.5	25.0	17.5	19.0	11.5	21.0	6.0
15	15.5	8.5	18.5	12.5	17.5	14.0	27.0	18.0	22.0	6.5	22.0	9.5
16	11.5	8.0	15.5	12.0	17.5	13.5	24.0	16.5	20.5	9.5	21.5	8.5
17	10.0	5.5	12.5	9.5	18.0	14.0	28.5	14.5	22.5	10.0	19.5	11.0
18	12.0	3.5	10.5	7.5	17.5	13.5	30.0	16.5	21.5	10.0	14.0	5.5
19	8.0	5.5	12.0	6.5	18.0	14.0	30.0	16.5	23.0	10.0	7.0	3.0
20	13.5	4.5	13.5	7.5	18.5	14.0	---	---	23.0	12.0	13.5	3.0
21	8.0	3.5	13.5	11.5	---	---	---	---	25.0	13.5	14.0	2.5
22	9.0	1.5	15.5	11.0	---	---	---	---	22.0	15.5	15.5	4.0
23	11.0	3.5	15.0	12.0	---	---	---	---	24.5	13.5	18.5	5.5
24	15.0	5.0	14.5	11.5	---	---	---	---	24.0	11.0	20.0	7.5
25	15.5	9.0	14.0	10.5	---	---	30.0	20.0	23.0	13.0	23.0	10.5
26	16.5	8.0	14.5	10.0	20.0	18.5	30.5	16.5	25.5	12.0	20.5	10.0
27	12.5	9.0	14.5	11.0	20.5	16.5	29.5	16.5	25.5	11.5	19.5	8.0
28	12.5	7.5	15.0	11.0	18.5	16.5	---	---	28.0	11.5	19.5	8.5
29	13.5	8.0	16.0	11.0	20.0	16.0	---	---	28.0	11.0	20.0	8.5
30	12.0	8.0	15.5	12.0	21.0	17.0	---	---	27.0	11.0	19.0	6.0
31	---	---	16.0	11.5	---	---	---	---	22.5	12.0	---	---

09260000 LITTLE SNAKE RIVER NEAR LILY, CO--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM (70337)	SED. SUSP. FALL DIAM. % FINER THAN .004 MM (70338)	SED. SUSP. FALL DIAM. % FINER THAN .016 MM (70340)	SED. SUSP. FALL DIAM. % FINER THAN .062 MM (70342)
OCT									
01...	1000	1.1	89	.26	--	--	--	--	--
08...	1000	6.0	4970	81	--	--	--	--	--
11...	1050	28	948	72	99	--	--	--	--
15...	1000	28	292	22	99	--	--	--	--
22...	1000	21	286	16	--	--	--	--	--
29...	1000	34	533	49	--	--	--	--	--
NOV									
05...	1000	44	795	94	--	--	--	--	--
12...	1000	38	340	35	--	--	--	--	--
17...	1200	38	691	71	98	--	--	--	--
19...	1000	30	321	26	--	--	--	--	--
26...	1000	78	328	69	--	--	--	--	--
DEC									
03...	1000	106	1380	395	--	--	--	--	--
10...	1000	126	142	48	--	--	--	--	--
14...	1000	140	176	67	--	--	--	--	--
15...	1300	144	2270	883	43	--	--	--	--
17...	1000	130	151	53	--	--	--	--	--
31...	1000	151	182	74	--	--	--	--	--
JAN									
07...	1000	130	169	59	--	--	--	--	--
14...	1000	145	276	108	--	--	--	--	--
21...	1000	70	291	55	--	--	--	--	--
25...	1300	65	72	13	97	--	--	--	--
28...	1000	90	619	150	86	--	--	--	--
FEB									
11...	1000	120	145	47	--	--	--	--	--
15...	1430	117	290	92	27	--	--	--	--
16...	1000	130	292	102	--	--	--	--	--
MAR									
11...	1000	405	1630	1780	--	--	--	--	--
18...	1000	410	834	923	--	--	--	--	--
21...	0910	494	9500	12700	100	65	76	96	100
25...	1000	956	7200	18600	--	--	--	--	--
APR									
01...	1000	588	3240	5140	97	--	--	--	--
08...	1000	641	2240	3880	98	--	--	--	--
14...	1000	773	1400	2920	--	--	--	--	--
20...	1430	625	973	1640	77	--	--	--	--
21...	1000	649	748	1310	--	--	--	--	--

09260000 LITTLE SNAKE RIVER NEAR LILY, CO--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SED. SUSP. FALL DIAM. % FINER THAN .062 MM (70342)	SED. SUSP. FALL DIAM. % FINER THAN .125 MM (70343)	SED. SUSP. FALL DIAM. % FINER THAN .250 MM (70344)	SED. SUSP. FALL DIAM. % FINER THAN .500 MM (70345)	SED. SUSP. FALL DIAM. % FINER THAN 1.00 MM (70346)
APR										
28...	1000	1190	2350	7550	94	--	--	--	--	--
MAY										
06...	1000	1820	2330	11500	--	--	--	--	--	--
13...	1000	1530	951	3930	--	--	--	--	--	--
19...	1000	3920	2130	22500	--	--	--	--	--	--
22...	1515	33[illegible]0	2400	21800	66	--	--	--	--	--
26...	1000	4360	1480	17400	--	--	--	--	--	--
JUN										
03...	1000	2970	545	4370	--	--	--	--	--	--
08...	1230	3370	1210	11000	--	43	61	83	98	100
10...	1000	3360	637	5780	--	--	--	--	--	--
18...	1000	3720	540	5420	--	--	--	--	--	--
24...	1000	2860	658	5080	--	--	--	--	--	--
30...	1000	1730	360	1680	--	--	--	--	--	--
JUL										
07...	1000	1020	465	1280	--	--	--	--	--	--
14...	1000	663	248	444	--	--	--	--	--	--
22...	1000	280	206	156	--	--	--	--	--	--
25...	1230	215	136	79	--	--	--	--	--	--
29...	1000	103	20	5.6	--	--	--	--	--	--
AUG										
04...	1000	109	76	22	--	--	--	--	--	--
11...	1000	22	14	.83	--	--	--	--	--	--
18...	1000	121	1040	340	--	--	--	--	--	--
23...	1330	51	302	42	72	--	--	--	--	--
25...	1000	153	5130	2120	--	--	--	--	--	--
SEP										
01...	1000	13	154	5.4	--	--	--	--	--	--
09...	1000	16	1750	76	--	--	--	--	--	--
16...	1000	17	518	24	--	--	--	--	--	--
22...	1000	123	17300	5750	--	--	--	--	--	--
27...	1315	82	692	153	79	--	--	--	--	--
27...	1320	82	1860	412	28	--	--	--	--	--
29...	1000	123	389	129	--	--	--	--	--	--

09260000 LITTLE SNAKE RIVER NEAR LILY, CO--Continued

PHYTOPLANKTON DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

		OCT 11,77	NOV 17,77	MAR 21,78	MAY 22,78	JUN 8,78
DATE		OCT 11,77	NOV 17,77	MAR 21,78	MAY 22,78	JUN 8,78
TIME		0930	1030	1100	1345	1400
TOTAL CELLS/ML		28000	61	2500	120	67
DIVERSITY:	DIVISION	1.4	1.4	0.7	0.0	0.0
	.CLASS	1.4	1.4	0.7	0.0	0.0
	..ORDER	1.5	1.4	0.7	0.0	0.0
	...FAMILY	2.1	2.0	2.2	0.0	0.0
	....GENUS	2.3	2.5	2.2	0.0	0.0

ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHLOROPHYTA (GREEN ALGAE)										
.CHLOROPHYCEAE										
..CHLOROCOCCALES										
...MICRACTINIACEAE										
....GOLENKINIA	170	1	--	-	--	-	--	-	--	-
...OOCYSTACEAE										
....ANKISTRODESMUS	1900	7	--	-	--	-	--	-	--	-
....CHLORELLA	170	1	--	-	--	-	--	-	--	-
....OOCYSTIS	170	1	--	-	--	-	--	-	--	-
....TREUBARIA	--	-	8	13	--	-	--	-	--	-
...SCENEDESMACEAE										
....ACTINASTRUM	14000#	49	--	-	--	-	--	-	--	-
CHRYSOPHYTA										
.BACILLARIOPHYCEAE										
..CENTRALES										
...COSCINODISCACEAE										
....CYCLOTELLA	350	1	--	-	--	-	--	-	--	-
..PENNALES										
...CYMBELLACEAE										
....CYMBELLA	170	1	--	-	--	-	--	-	--	-
...DIATOMACEAE										
....DIATOMA	--	-	8	13	270	11	--	-	--	-
...FRAGILARIACEAE										
....SYNEDRA	--	-	--	-	550#	22	--	-	--	-
...GOMPHONEMATACEAE										
....GOMPHONEMA	--	-	--	-	410#	17	--	-	--	-
...NAVICULACEAE										
....NAVICULA	1000	4	8	13	820#	33	120#	100	--	-
....NEIDIUM	350	1	--	-	--	-	--	-	--	-
...NITZSCHIACEAE										
....CYLINDROTHECA	1200	4	--	-	--	-	--	-	--	-
....NITZSCHIA	2100	7	8	13	--	-	--	-	67#	100
...SURIRELLACEAE										
....SURIRELLA	170	1	--	-	--	-	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)										
.CYANOPHYCEAE										
..HORMOGONALES										
...NOSTOCACEAE										
....ANABAENA	6500#	23	--	-	--	-	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)										
.EUGLENOPHYCEAE										
..EUGLENALES										
...EUGLENACEAE										
....EUGLENA	--	-	15#	25	--	-	--	-	--	-
....TRACHELOMONAS	--	-	15#	25	410#	17	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

09260025 YAMPA RIVER BELOW LITTLE SNAKE RIVER, CO.

WATER-QUALITY RECORDS

LOCATION.--Lat 40°26'21", long 108°28'19", in SW¼SW¼ sec.25, T.6 N., R.99 W., Moffat County, Hydrologic Unit 14050002, 2.1 mi (3.4 km) downstream from Little Snake River, and 6 mi (9.7 km) north of Elk Springs.

PERIOD OF RECORD.--November 1977 to September 1978.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: November 1977 to September 1978.
WATER TEMPERATURES: November 1977 to September 1978.

INSTRUMENTATION.--Water-quality monitor since November 1977.

REMARKS.--Daily maximum and minimum specific conductance data available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 775 micromhos Sept. 22, 1978; minimum, 64 micromhos July 13, 1978.
WATER TEMPERATURES: Maximum, 26.5°C July 29, 1978; minimum, 0.0°C many days during winter period.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 775 micromhos Sept. 22; minimum, 64 micromhos July 13.
WATER TEMPERATURES: Maximum, 26.5°C July 29; minimum, 0.0°C many days during December to February.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		502	460	367	---	528	702	---	---	155	255	424
2		499	489	370	---	529	687	---	---	141	258	433
3		493	481	375	---	537	667	---	---	153	264	442
4		491	468	386	---	548	616	---	---	178	274	447
5		509	469	375	---	534	640	---	---	147	280	451
6		504	460	372	---	520	658	---	---	---	291	460
7		484	441	361	---	548	665	---	---	---	307	---
8		476	497	360	---	592	662	---	---	---	318	---
9		462	515	385	---	598	632	---	---	---	329	502
10		446	550	393	---	616	545	---	---	---	335	496
11		433	504	439	---	618	479	---	---	---	339	556
12		433	456	381	---	628	484	320	---	104	345	637
13		440	450	392	---	632	500	270	---	79	369	564
14		434	406	476	---	638	450	253	---	88	389	565
15		458	383	479	---	606	394	241	221	130	450	575
16		457	375	485	---	596	403	---	205	147	378	552
17		454	404	478	---	612	381	---	196	153	329	543
18		491	477	464	---	601	374	---	181	144	300	559
19		495	537	457	---	602	353	---	164	153	295	577
20		455	---	473	---	614	364	---	162	165	299	558
21		444	615	473	---	596	374	---	146	172	---	643
22		477	653	468	---	574	362	---	145	174	325	749
23		477	607	465	559	578	347	---	131	183	344	671
24		471	585	440	560	590	353	---	120	196	359	567
25		454	545	---	556	603	372	---	108	212	385	524
26		425	553	---	544	611	377	---	125	236	384	510
27		526	562	---	534	641	358	---	123	241	424	494
28		520	521	---	522	615	322	---	125	243	412	480
29		514	510	---	---	596	---	---	137	247	411	476
30		476	455	---	---	616	---	---	143	252	413	471
31		---	385	---	---	635	---	---	---	266	418	---

09260025 YAMPA RIVER BELOW LITTLE SNAKE RIVER, CO--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1			6.5	3.0	1.5	.5	1.0	.5	---	---	1.0	.5
2			7.5	3.0	3.0	1.0	1.0	.0	---	---	1.0	.5
3			8.0	3.5	3.0	1.0	1.0	.5	---	---	1.0	.5
4			9.5	5.0	3.5	1.5	1.0	.5	---	---	1.0	.5
5			9.5	6.0	3.0	.5	1.0	.5	---	---	1.5	1.0
6			9.0	6.5	1.5	.5	1.0	.5	---	---	---	---
7			9.5	5.5	2.5	1.0	1.0	.5	---	---	---	---
8			5.5	1.0	1.0	.5	1.0	.5	---	---	---	---
9			3.0	.5	1.0	.5	1.0	.5	---	---	---	---
10			3.5	.5	1.5	.5	1.0	.5	---	---	---	---
11			4.0	.5	1.5	.5	1.0	.5	---	---	---	---
12			6.0	1.5	1.5	.5	1.0	.5	---	---	---	---
13			5.5	1.0	2.0	.5	1.0	.5	---	---	---	---
14			6.0	1.0	3.0	.5	1.0	.5	---	---	---	---
15			6.5	2.5	3.0	.5	1.0	.5	---	---	---	---
16			6.5	2.5	1.0	.5	1.0	.5	---	---	---	---
17			4.5	1.5	1.0	.5	1.0	.0	---	---	---	---
18			6.0	2.5	1.0	.5	1.0	.5	---	---	---	---
19			4.0	.5	.5	.5	1.0	.5	---	---	---	---
20			1.0	.5	1.0	.0	1.0	.5	---	---	---	---
21			1.0	.5	.5	.0	1.0	.5	---	---	11.5	9.5
22			1.5	.5	.5	.0	1.0	.5	---	---	11.5	9.5
23			1.0	.5	1.0	.5	.5	.5	1.0	.5	12.0	9.0
24			1.5	.5	1.0	.5	.5	.5	1.0	.0	11.5	9.0
25			1.5	.5	1.0	.5	---	---	1.0	.5	10.5	7.0
26			2.5	1.0	1.0	.5	---	---	1.0	.5	12.0	7.5
27			2.5	1.0	.5	.5	---	---	1.0	.5	14.0	9.5
28			2.5	.5	1.0	.5	---	---	1.0	.5	15.0	10.5
29			1.5	.5	1.0	.5	---	---	---	---	15.0	11.0
30			2.0	.5	1.0	.5	---	---	---	---	15.0	12.0
31			---	---	1.0	.5	---	---	---	---	14.5	12.0

09260025 YAMPA RIVER BELOW LITTLE SNAKE RIVER, CO--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	13.5	11.5	13.0	11.0	13.5	11.0	17.0	14.5	22.5	18.5	20.0	15.5
2	12.0	10.5	---	---	13.0	11.0	17.5	14.5	23.5	19.5	21.5	15.5
3	10.5	9.0	---	---	14.0	11.5	17.0	15.0	24.5	20.0	22.5	13.5
4	10.5	8.0	---	---	13.5	11.5	17.5	15.0	24.0	20.0	23.0	17.5
5	10.5	9.0	---	---	13.0	12.0	18.0	15.5	24.5	20.5	22.5	18.0
6	12.0	9.0	---	---	12.5	11.0	---	---	25.5	20.5	22.0	17.5
7	12.0	10.0	---	---	13.5	11.0	---	---	25.5	21.0	22.5	17.0
8	13.5	11.0	---	---	15.0	12.5	---	---	25.5	20.5	19.5	15.0
9	12.5	10.5	---	---	15.0	12.5	---	---	24.5	20.5	20.5	16.0
10	10.5	9.0	---	---	15.0	13.5	---	---	24.0	20.5	19.0	15.5
11	11.0	8.5	---	---	16.0	13.0	---	---	23.5	20.5	17.0	13.5
12	11.5	8.0	13.5	12.0	15.5	13.0	20.0	19.0	22.5	20.0	15.5	10.5
13	11.0	9.5	14.0	10.5	16.0	13.5	21.0	18.5	20.0	16.5	15.5	9.5
14	11.5	9.0	15.5	12.0	15.0	13.5	21.0	19.5	20.0	15.0	15.0	10.0
15	11.5	9.5	16.0	13.5	15.0	13.0	21.5	19.0	19.0	16.0	17.0	11.5
16	10.5	9.0	14.5	13.5	15.0	12.5	22.0	19.5	20.0	16.0	17.5	12.0
17	9.0	8.0	13.5	11.5	15.0	13.0	21.5	19.5	19.5	15.5	16.0	13.5
18	8.5	6.5	11.0	8.5	15.0	12.5	22.0	19.5	20.5	16.0	13.5	9.0
19	9.5	6.5	10.5	7.5	15.0	12.5	23.0	20.0	20.5	16.5	8.5	6.0
20	11.0	7.5	13.0	9.0	15.0	12.5	22.5	20.0	22.0	18.0	9.0	5.0
21	10.0	7.5	14.0	12.0	15.5	12.5	23.0	19.0	20.5	19.5	14.0	4.5
22	9.5	7.0	13.5	11.5	15.5	13.0	23.0	20.0	20.5	19.0	15.5	9.0
23	10.5	7.0	13.0	11.5	15.5	13.5	23.5	20.0	21.0	18.0	18.0	10.5
24	12.5	8.0	13.5	11.0	14.5	14.0	23.5	20.5	20.5	17.0	18.5	12.5
25	14.0	11.0	12.5	10.5	16.0	13.5	25.0	20.5	21.0	17.0	19.5	14.5
26	15.0	12.0	12.5	10.5	15.5	12.5	26.0	21.0	21.5	17.0	19.5	14.5
27	14.0	11.5	12.5	10.5	15.5	13.0	25.0	21.5	21.5	17.0	18.5	14.0
28	12.0	11.0	12.5	10.5	15.0	13.0	24.0	21.5	21.0	16.0	17.5	13.5
29	11.5	10.5	13.0	10.5	15.0	13.5	26.5	21.0	22.0	16.5	17.5	13.5
30	12.0	10.5	14.0	11.5	16.0	13.0	24.0	21.5	22.0	17.0	17.5	12.5
31	---	---	14.0	11.0	---	---	22.0	20.0	20.0	17.0	---	---

09302450 LOST CREEK NEAR BUFORD, CO

LOCATION (REVISED).--Lat 40°03'01", long 107°28'06", in SE¼SE¼ sec.15, T.1 N., R.90 W., Rio Blanco County, Hydrologic Unit 14050005, on left bank 15 ft (5 m) downstream from highway bridge, 540 ft (165 m) upstream from mouth, 0.5 mi (0.8 km) downstream from Long Park Creek, and 9 mi (14 km) northeast of Buford.

DRAINAGE AREA.--21.6 mi² (55.9 km²).

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 7,560 ft (2,304 m), from topographic map. Oct. 1, 1973, to Sept. 30, 1975, at site 150 ft (46 m) upstream at same datum.

REMARKS.--Records fair except those for winter period, which are poor. No diversion above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--14 years, 21.4 ft³/s (0.606 m³/s), 15,500 acre-ft/yr (19.1 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 944 ft³/s (26.7 m³/s) May 9, 1974, gage height, 7.53 ft (2.295 m), from rating curve extended above 260 ft³/s (7.4 m³/s); minimum daily, 0.30 ft³/s (0.008 m³/s) Jan. 9, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 150 ft³/s (4.2 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
May 3	2100	189	5.35	3.20	0.975	May 16	1800	780	22.1	4.73	1.442
May 15	1900	*780	22.1	4.74	1.445	May 23	1800	600	17.0	4.28	1.305

Minimum daily discharge, 0.48 ft³/s (0.014 m³/s) Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.48	2.3	2.9	1.8	2.1	2.3	18	98	177	16	2.9	1.5
2	.99	2.4	3.1	2.4	2.1	2.3	16	113	171	14	2.6	1.5
3	1.1	2.7	3.0	2.0	2.1	2.3	17	159	157	14	2.3	1.5
4	1.1	2.7	2.7	1.9	2.1	2.3	18	140	154	12	2.2	1.5
5	1.4	3.0	2.5	1.9	2.1	2.3	16	104	137	10	2.2	1.5
6	2.6	3.1	2.6	1.9	2.2	2.4	13	81	130	8.4	2.1	1.5
7	4.7	3.2	2.6	1.9	2.2	2.4	16	67	134	7.7	2.1	1.6
8	2.8	2.8	2.3	2.0	2.2	2.4	21	58	122	6.5	2.2	2.0
9	2.4	2.4	2.5	1.9	2.2	2.4	26	59	132	6.3	2.2	1.8
10	2.3	2.7	2.3	1.9	2.2	2.4	27	74	137	6.3	2.2	1.7
11	1.9	2.8	2.3	1.9	2.2	2.4	25	88	121	7.3	2.2	2.0
12	1.8	3.1	2.3	1.9	2.2	2.4	29	100	93	7.1	2.2	2.1
13	1.7	3.1	2.3	1.8	2.2	2.4	34	162	89	5.4	3.0	1.9
14	1.9	3.1	2.3	2.0	2.2	2.4	34	317	83	4.9	3.0	1.9
15	1.7	3.4	2.2	2.0	2.2	2.4	38	476	75	4.3	3.8	1.9
16	1.6	3.2	2.2	2.0	2.2	2.5	40	550	68	4.3	3.1	1.8
17	1.4	3.2	2.3	2.0	2.2	2.8	37	329	56	5.8	2.5	2.1
18	1.3	3.7	2.4	2.0	2.3	3.1	33	183	49	6.1	2.3	2.4
19	1.2	3.4	2.2	2.0	2.3	3.8	31	192	47	4.9	2.4	2.4
20	1.2	3.8	2.2	2.1	2.3	4.8	34	277	46	4.9	2.3	2.3
21	1.4	4.2	2.4	2.0	2.3	6.1	43	295	43	4.0	2.3	2.0
22	1.4	3.8	2.2	2.0	2.3	6.5	38	334	43	3.5	2.3	2.3
23	1.3	3.7	2.0	2.0	2.3	6.1	34	392	42	3.3	2.2	2.0
24	1.4	3.5	2.0	2.1	2.3	5.6	40	391	41	3.0	2.0	1.9
25	1.4	3.5	2.0	2.1	2.3	5.2	63	285	39	2.9	2.0	1.9
26	1.4	3.5	1.8	2.1	2.3	5.4	97	259	37	2.7	1.9	1.8
27	1.5	3.1	1.9	2.2	2.3	5.8	134	220	26	2.6	1.8	1.8
28	1.6	3.4	1.9	2.2	2.3	5.6	107	193	22	2.6	1.8	1.8
29	1.8	3.0	1.9	2.2	---	8.4	107	213	25	2.7	1.7	1.8
30	2.6	3.0	1.8	2.1	---	9.8	113	228	20	2.7	1.6	1.8
31	2.5	---	1.9	2.1	---	13	---	191	---	2.6	1.5	---
TOTAL	53.87	94.8	71.0	62.4	62.2	130.0	1299	6628	2514	188.8	70.9	56.0
MEAN	1.74	3.16	2.29	2.01	2.22	4.19	43.3	214	83.8	6.09	2.29	1.87
MAX	4.7	4.2	3.1	2.4	2.3	13	134	550	177	16	3.8	2.4
MIN	.48	2.3	1.8	1.8	2.1	2.3	13	58	20	2.6	1.5	1.5
AC-FT	107	188	141	124	123	258	2580	13150	4990	374	141	111

CAL YR 1977 TOTAL 1947.54 MEAN 5.34 MAX 60 MIN .30 AC-FT 3860
WTR YR 1978 TOTAL 11230.97 MEAN 30.8 MAX 550 MIN .48 AC-FT 22280

09302500 MARVINE CREEK NEAR BUFORD, CO

LOCATION (REVISED).--Lat 40°02'18", long 107°29'15", in NE¼SE¼ sec.21, T.1 N., R.90 W., Rio Blanco County, Hydrologic Unit 14050005, on right bank 166 ft (50 m) upstream from county road bridge, 1,800 ft (550 m) upstream from mouth, and 8 mi (13 km) northeast of Buford. Prior to Oct. 1, 1975, at site 126 ft (38 m) downstream.

DRAINAGE AREA.--59.4 mi² (153.8 km²).

PERIOD OF RECORD.--July 1903 to September 1906, September 1972 to current year.

REVISED RECORDS.--WSP 1313: 1905-6.

GAGE.--Water-stage recorder. Altitude of gage is 7,500 ft (2,286 m), from topographic map. July 28, 1903, to Sept. 30, 1906, nonrecording gage at approximately same site at different datum. Sept. 1, 1972, to Sept. 30, 1973, at site 40 ft (12 m) downstream at datum 1.69 ft (0.515 m) higher. Oct. 1, 1973, to Sept. 30, 1975, at site 126 ft (38 m) downstream at datum 5.0 ft (1.5 m) higher.

REMARKS.--Records good except those for winter period, which are poor. Diversions above station for irrigation of 310 acres (1.25 km²) of hay meadows. One small transbasin diversion above station to Ute Creek basin. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--9 years, 94.2 ft³/s (2.668 m³/s), 68,250 acre-ft/yr (84.2 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 723 ft³/s (20.5 m³/s) June 17, 1905, gage height, 3.50 ft (1.067 m), datum then in use; maximum gage height recorded, 5.39 ft (1.643 m), Dec. 17, 1972, site then in use (backwater from ice); minimum discharge not determined, probably occurred during period of no gage-height record.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 399 ft³/s (11.3 m³/s) at 2200 June 25, gage height, 3.89 ft (1.186 m), only peak above base of 300 ft³/s (8.5 m³/s); minimum daily, 31 ft³/s (0.878 m³/s) Dec. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	43	44	49	43	43	63	74	158	278	106	84
2	42	44	44	49	44	43	55	77	167	267	105	86
3	42	43	44	49	45	44	51	86	166	253	103	82
4	42	43	43	48	43	43	48	84	160	233	101	82
5	48	43	43	45	43	43	49	79	154	224	98	83
6	48	43	31	43	43	43	47	72	153	197	101	81
7	52	44	43	42	43	43	51	67	156	182	101	82
8	46	43	40	39	44	43	55	64	158	170	97	82
9	45	42	37	42	44	43	56	62	176	162	94	80
10	44	45	42	42	44	42	51	68	202	157	94	80
11	43	45	40	42	44	42	52	70	215	153	97	86
12	43	44	42	42	44	42	55	72	209	150	96	85
13	43	42	39	41	45	42	55	80	208	143	99	81
14	42	42	45	40	44	42	58	102	226	138	111	80
15	44	43	43	42	45	41	62	130	235	134	107	79
16	42	42	42	42	45	42	64	155	247	131	100	79
17	42	43	45	43	45	42	62	160	258	139	96	85
18	42	45	41	43	45	42	58	128	272	133	97	85
19	42	45	38	39	45	43	55	112	274	128	96	84
20	42	44	41	42	45	43	57	119	264	123	94	83
21	45	47	41	43	45	43	61	130	273	120	91	81
22	44	49	45	43	45	43	56	140	293	117	100	82
23	43	48	48	42	44	44	53	153	311	114	100	78
24	42	46	49	42	43	44	56	165	337	109	97	76
25	42	46	48	43	42	44	63	159	373	113	96	76
26	42	45	50	44	43	44	73	153	343	108	94	75
27	42	46	49	42	44	45	83	156	325	105	88	74
28	42	46	50	38	43	45	76	146	320	104	86	74
29	42	45	49	43	---	45	75	150	302	101	86	74
30	46	44	48	43	---	48	77	163	286	100	85	73
31	44	---	48	42	---	53	---	164	---	104	84	---
TOTAL	1350	1330	1352	1329	1232	1349	1777	3540	7221	4690	3000	2412
MEAN	43.5	44.3	43.6	42.9	44.0	43.5	59.2	114	241	151	96.8	80.4
MAX	52	49	50	49	45	53	83	165	373	278	111	86
MIN	42	42	31	38	42	41	47	62	153	100	84	73
AC-FT	2680	2640	2680	2640	2440	2680	3520	7020	14320	9300	5950	4780

CAL YR 1977 TOTAL 19995 MEAN 54.8 MAX 141 MIN 31 AC-FT 39660
WTR YR 1978 TOTAL 30582 MEAN 83.8 MAX 373 MIN 31 AC-FT 60660

09303000 NORTH FORK WHITE RIVER AT BUFORD, CO

LOCATION.--Lat 39°59'15", long 107°36'50", in NW¼NW¼ sec.9, T.1 S., R.91 W., Rio Blanco County, Hydrologic Unit 14050005, on right bank 600 ft (180 m) east of Buford and 1.2 mi (1.9 km) upstream from South Fork White River.

DRAINAGE AREA.--254 mi² (658 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1910 to December 1915, July 1919 to December 1920, October 1951 to current year. Monthly discharge only for some periods, published in WSP 1313. Published as North Fork White River near Buford prior to 1951 and as White River at Buford 1951-67. Records for July 1903 to December 1906 at site 6.5 mi (10.5 km) upstream not equivalent because of inflow between sites.

REVISED RECORDS.--WSP 1343: 1912. WSP 1513: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 7,010 ft (2,137 m), from topographic map. May 24, 1910, to May 27, 1914, nonrecording gage at site 1.5 mi (2.4 km) upstream at different datum. May 28, 1914, to Dec. 7, 1915, and July 1, 1919, to Oct. 9, 1920, nonrecording gage at present site at different datum.

REMARKS.--Records fair except those for period of no gage-height record, which are poor. Diversions above station for irrigation of about 900 acres (3.64 km²) above and 300 acres (1.21 km²) below station.

AVERAGE DISCHARGE.--33 years (water years 1911-15, 1920, 1952-78), 307 ft³/s (8.694 m³/s), 222,400 acre-ft/yr (274 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 3,150 ft³/s (89.2 m³/s) May 30, 1912; maximum gage height, 7.22 ft (2.201 m) Jan. 9, 1961 (backwater from ice); minimum daily discharge, 90 ft³/s (2.55 m³/s) Feb. 21, 1955.

EXTREMES FOR CURRENT YEAR.--Peaks above base of 1,000 ft³/s (28 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
May 17	0100	1,510	42.8	*6.11	1.862	June 15	2400	*1,580	44.7	6.09	1.856
May 23	2400	1,380	39.1	5.92	1.804	June 24	2400	1,460	41.3	5.91	1.801

Minimum daily discharge, 108 ft³/s (3.06 m³/s) Nov. 16-27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	110	115	120	138	122	116	286	434	1060	1090	366	205
2	110	115	120	138	122	116	233	462	1100	1040	354	208
3	111	115	120	138	122	116	200	580	1080	999	330	205
4	110	115	120	138	122	116	183	570	1060	936	318	202
5	126	115	120	138	122	116	178	498	1030	887	310	200
6	155	115	134	138	122	116	164	448	1020	824	306	197
7	173	118	134	138	122	116	183	410	1080	761	303	192
8	141	112	134	138	122	116	233	386	1070	722	303	194
9	130	110	130	138	122	116	250	374	1150	686	296	189
10	127	118	125	138	122	116	212	434	1320	686	282	186
11	119	130	125	138	122	116	205	475	1370	674	286	202
12	121	110	125	138	122	116	244	493	1340	656	286	200
13	120	110	125	138	122	116	230	600	1350	605	289	192
14	120	110	125	138	122	118	233	831	1410	565	318	186
15	119	110	125	138	122	119	258	1130	1430	550	314	181
16	119	108	125	138	122	121	272	1290	1470	535	286	178
17	118	108	125	138	122	123	264	1210	1430	595	268	197
18	117	108	125	138	122	125	233	880	1370	580	268	205
19	117	108	125	138	122	130	226	775	1360	520	261	205
20	117	108	125	138	122	135	254	894	1310	502	254	197
21	126	108	125	138	122	137	300	992	1290	484	247	192
22	127	108	125	138	122	147	272	1060	1310	457	247	192
23	121	108	125	138	122	139	254	1180	1330	439	244	181
24	120	108	125	138	122	137	286	1230	1350	418	236	176
25	119	108	125	122	116	130	374	1190	1410	402	236	173
26	117	108	125	122	116	131	430	1080	1310	394	236	173
27	110	108	125	122	116	137	511	1100	1220	386	230	171
28	111	110	125	122	116	149	448	1020	1190	366	226	171
29	119	110	125	122	---	166	448	1060	1190	362	216	171
30	110	118	125	122	---	186	466	1150	1130	362	208	166
31	115	---	125	122	---	219	---	1110	---	354	205	---
TOTAL	3775	3352	3882	4166	3392	4057	8330	25350	37540	18837	8529	5687
MEAN	122	112	125	134	121	131	278	818	1251	608	275	190
MAX	173	130	134	138	122	219	511	1290	1470	1090	366	208
MIN	110	108	120	122	116	116	164	378	1020	354	205	166
AC-FT	7490	6650	7700	8260	6730	8050	16520	50280	74460	37360	16920	11280

CAL YR 1977 TOTAL 54543 MEAN 149 MAX 394 MIN 96 AC-FT 108200
WTR YR 1976 TOTAL 126897 MEAN 348 MAX 1470 MIN 108 AC-FT 251700

09303000 NORTH FORK WHITE RIVER AT BUFORD, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1976 to February 1978 (discontinued).

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)
NOV									
10...	1230	154	363	8.0	.0	5.4	11	200	99
DEC									
05...	1430	119	362	7.9	1.0	11.2	8	190	95
JAN									
11...	1030	138	362	7.7	1.0	11.7	4	180	99
FEB									
06...	1100	122	365	8.1	2.0	10.4	72	190	95

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)
NOV									
10...	61	11	3.4	.1	1.0	120	0	98	100
DEC									
05...	56	11	3.1	.1	.9	110	0	90	98
JAN									
11...	55	10	3.5	.1	1.0	97	0	80	99
FEB									
06...	56	11	3.5	.1	.9	110	0	90	92

DATE	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)
NOV									
10...	.7	.1	19	256	.06	.00	.37	.37	.05
DEC									
05...	.5	.2	19	236	.13	.01	.04	.05	.02
JAN									
11...	.7	.1	19	237	.17	.00	1.1	1.1	.03
FEB									
06...	.4	.1	19	239	.44	.01	.99	1.0	.02

DATE	TIME	ARSENIC DIS-SOLVED (UG/L AS AS)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)
DEC								
05...	1430	1	20	6	8	.0	0	1.4

09303000 NORTH FORK WHITE RIVER AT BUFORD, CO--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT				
29...	1320	145	18	7.0
DEC				
09...	1130	145	6	2.3
JAN				
10...	1315	120	5	1.6
FEB				
03...	1130	111	28	8.3
MAR				
03...	1430	125	11	3.7
APR				
25...	1400	275	46	34
MAY				
26...	1145	219	12	7.1
JUN				
22...	1400	145	8	3.1
JUL				
22...	1130	118	8	2.5
AUG				
29...	1100	140	9	3.4
SEP				
26...	1000	111	8	2.4

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
NOV				
10...	1200	153	14	5.8
DEC				
05...	1415	119	4	1.3
JAN				
11...	1000	138	8	3.0

09303300 SOUTH FORK WHITE RIVER AT BUDGE'S RESORT, CO

LOCATION.--Lat 39°50'36", long 107°20'03", in NW¼ sec.36, T.2 S., R.89 W., Garfield County, Hydrologic Unit 14050005, on right bank 20 ft (6 m) upstream from Forest Service trail bridge, 0.2 mi (0.3 km) upstream from Wagonwheel Creek, and 0.3 mi (0.5 km) northeast of Budge's Resort. Prior to July 7, 1976, at site on left bank 50 ft (15 m) upstream at datum 1.3 ft (0.396 m) lower.

DRAINAGE AREA.--50.4 mi^2 (130.5 km^2).

PERIOD OF RECORD.--June 1975 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 8,980 ft (2,737 m), from topographic map. June 1, 1975, to July 7, 1976, at site on left bank 50 ft (15 m) upstream at datum 1.3 ft (0.396 m) lower.

REMARKS.--Records poor. No diversion above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 1,500 ft^3/s (42.5 m^3/s) June 16, 1978; minimum daily, 21 ft^3/s (0.59 m^3/s) Sept. 29, 30, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, about 1,500 ft^3/s (42.5 m^3/s) June 16; minimum daily, 41 ft^3/s (1.16 m^3/s) Nov. 10, 1977, to Mar. 2, 1978.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	48	47	41	41	41	41	79	110	660	600	90	60
2	48	46	41	41	41	41	73	110	700	560	89	60
3	47	47	41	41	41	42	69	125	715	504	83	60
4	48	47	41	41	41	42	64	131	802	440	80	59
5	50	47	41	41	41	43	64	129	795	380	78	58
6	55	48	41	41	41	43	62	125	737	343	76	58
7	62	49	41	41	41	44	64	121	784	306	74	61
8	57	46	41	41	41	44	71	120	813	284	73	61
9	55	43	41	41	41	45	74	114	912	264	75	58
10	53	41	41	41	41	45	71	122	1110	247	74	58
11	50	41	41	41	41	45	71	129	1250	240	73	64
12	50	41	41	41	41	46	75	129	1240	223	74	61
13	50	41	41	41	41	46	75	138	1270	207	77	59
14	49	41	41	41	41	46	76	179	1370	188	81	57
15	49	41	41	41	41	47	81	251	1410	176	77	56
16	49	41	41	41	41	47	81	335	1490	167	73	56
17	49	41	41	41	41	48	80	401	1410	172	71	63
18	49	41	41	41	41	48	77	335	1240	173	71	61
19	49	41	41	41	41	47	76	300	1210	165	69	59
20	49	41	41	41	41	46	76	310	1130	141	68	58
21	50	41	41	41	41	47	79	354	1150	134	67	57
22	48	41	41	41	41	49	77	399	1190	126	67	56
23	47	41	41	41	41	48	75	498	1230	117	66	55
24	47	41	41	41	41	48	74	595	1250	113	65	54
25	47	41	41	41	41	46	79	649	1320	107	65	54
26	47	41	41	41	41	47	89	617	1130	102	65	52
27	46	41	41	41	41	48	108	660	995	99	64	52
28	46	41	41	41	41	50	108	613	800	95	63	52
29	46	41	41	41	---	54	105	606	640	95	62	52
30	50	41	41	41	---	58	110	708	650	99	62	52
31	49	---	41	41	---	64	---	726	---	90	61	---
TOTAL	1539	1281	1271	1271	1148	1455	2363	10139	31403	6957	2233	1723
MEAN	49.6	42.7	41.0	41.0	41.0	46.9	78.8	327	1047	224	72.0	57.4
MAX	62	49	41	41	41	64	110	726	1490	600	90	64
MIN	46	41	41	41	41	41	62	110	640	90	61	52
AC-FT	3050	2540	2520	2520	2280	2890	4690	20110	62290	13800	4430	3420

CAL YR 1977 TOTAL 17894 MEAN 49.0 MAX 132 MIN 21 AC-FT 35490
WTR YR 1978 TOTAL 62783 MEAN 172 MAX 1490 MIN 41 AC-FT 124500

NOTE.--NO GAGE-HEIGHT RECORD OCT. 1 TO AUG. 8.

09303320 WAGONWHEEL CREEK AT BUDGE'S RESORT, CO

LOCATION.--Lat 39°50'40", long 107°20'10", in SW¼SW¼ sec.25, T.2 S., R.89 W., Garfield County, Hydrologic Unit 14050005, on right bank 60 ft (18 m) upstream from mouth and confluence of South Fork White River, about 800 ft (240 m) downstream from private road bridge, and 0.2 mi (0.3 km) north-northeast of Budge's Resort.

DRAINAGE AREA.--7.42 mi^2 (19.22 km^2).

PERIOD OF RECORD.--June 1975 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 8,980 ft (2,737 m), from topographic map.

REMARKS.--Records poor. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 180 ft^3/s (5.10 m^3/s) June 24, 1975, gage height, 4.10 ft (1.250 m); no flow many days in 1976-78.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, about 150 ft^3/s (4.2 m^3/s) June 15, only peak above base of 55 ft^3/s (1.6 m^3/s); no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.20	.20	.00	.00	.00	.00	.00	.16	20	31	2.5	1.0
2	.20	.20	.00	.00	.00	.00	.00	.16	22	26	2.4	.90
3	.20	.10	.00	.00	.00	.00	.00	.22	25	22	2.4	.90
4	.20	.10	.00	.00	.00	.00	.00	.30	27	19	2.3	.90
5	.20	.10	.00	.00	.00	.00	.00	.24	30	17	2.3	.90
6	.20	.10	.00	.00	.00	.00	.00	.20	38	15	2.2	.90
7	.20	.10	.00	.00	.00	.00	.00	.14	45	13	2.2	.90
8	.20	.10	.00	.00	.00	.00	.00	.12	55	12	2.1	1.0
9	.20	.10	.00	.00	.00	.00	.00	.18	67	12	2.1	1.0
10	.20	.10	.00	.00	.00	.00	.00	.14	82	11	2.1	1.1
11	.20	.10	.00	.00	.00	.00	.00	.14	100	9.8	2.1	1.2
12	.20	.10	.00	.00	.00	.00	.00	.14	104	7.2	2.0	1.1
13	.20	.10	.00	.00	.00	.00	.00	.16	108	5.8	2.2	1.1
14	.20	.10	.00	.00	.00	.00	.00	.30	111	5.1	2.4	1.1
15	.20	.10	.00	.00	.00	.00	.05	.32	114	4.5	2.3	1.1
16	.20	.10	.00	.00	.00	.00	.06	.35	109	4.2	2.1	1.1
17	.20	.10	.00	.00	.00	.00	.07	.59	105	4.2	1.9	1.1
18	.20	.10	.00	.00	.00	.00	.07	1.1	101	4.0	1.8	1.2
19	.20	.10	.00	.00	.00	.00	.09	1.1	98	3.9	1.8	1.1
20	.20	.10	.00	.00	.00	.00	.09	1.1	94	3.7	1.8	1.2
21	.20	.10	.00	.00	.00	.00	.09	1.9	93	3.6	1.7	1.1
22	.20	.10	.00	.00	.00	.00	.07	7.5	95	3.4	1.7	1.1
23	.20	.10	.00	.00	.00	.00	.07	14	97	3.3	1.6	1.0
24	.20	.10	.00	.00	.00	.00	.05	16	99	3.2	1.6	1.0
25	.20	.10	.00	.00	.00	.00	.06	16	100	3.0	1.5	.90
26	.20	.10	.00	.00	.00	.00	.10	16	87	2.9	1.5	.90
27	.20	.10	.00	.00	.00	.00	.24	16	76	2.8	1.4	.80
28	.20	.10	.00	.00	.00	.00	.24	15	67	2.7	1.3	.80
29	.20	.10	.00	.00	---	.00	.16	15	53	2.6	1.2	.70
30	.20	.10	.00	.00	---	.00	.16	17	38	2.6	1.1	.70
31	.20	---	.00	.00	---	.00	---	19	---	2.5	1.0	---
TOTAL	6.20	3.20	.00	.00	.00	.00	1.67	160.56	2260	263.0	58.6	29.80
MEAN	.20	.11	.000	.000	.000	.000	.056	5.18	75.3	8.48	1.89	.99
MAX	.20	.20	.00	.00	.00	.00	.24	19	114	31	2.5	1.2
MIN	.20	.10	.00	.00	.00	.00	.00	.12	20	2.5	1.0	.70
AC-FT	12	6.3	.00	.00	.00	.00	3.3	318	4480	522	116	59

CAL YR 1977 TOTAL 1311.45 MEAN 3.59 MAX 45 MIN .00 AC-FT 2600
WTR YR 1978 TOTAL 2783.03 MEAN 7.62 MAX 114 MIN .00 AC-FT 5520

09303400 SOUTH FORK WHITE RIVER NEAR BUDGE'S RESORT, CO

LOCATION.--Lat 39°51'51", long 107°32'00", in NW¼SE¼ sec.19, T.2 S., R.90 W., Rio Blanco County, Hydrologic Unit 14050005, on right bank on downstream side of Forest Service bridge, 300 ft (91 m) upstream from South Fork Campground, 10 mi (16.1 km) above mouth, and about 10.5 mi (17 km) southeast of Buford.

DRAINAGE AREA.--128 mi² (332 km²).

PERIOD OF RECORD.--May 1976 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 7,600 ft (2,316 m), from topographic map.

REMARKS.--Records good except those for period of no gage-height record, which are poor. No regulation or diversions above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,240 ft³/s (35.1 m³/s) June 3, 1976, gage height, 4.75 ft (1.448 m); minimum daily, 43 ft³/s (1.22 m³/s) Nov. 17-19, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 500 ft³/s (14 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
May 23	2400	974	27.6	4.26	1.298
June 4	0300	1270	36.0	4.59	1.399
June 14	2100	*2230	63.2	5.36	1.634

Minimum daily discharge, 43 ft³/s (1.22 m³/s) Nov. 17-19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59	50	52	70	62	55	123	184	923	757	161	100
2	58	52	52	70	62	55	109	184	982	706	153	99
3	58	53	52	70	62	55	99	206	1020	644	143	98
4	55	54	56	70	62	55	90	214	1080	585	139	97
5	64	54	56	70	62	55	86	211	1040	546	133	96
6	70	55	56	70	62	55	85	206	983	501	129	95
7	89	56	60	70	62	55	87	191	1060	480	126	99
8	74	52	60	70	58	55	100	186	1070	463	123	105
9	69	51	60	70	58	55	109	178	1250	452	126	98
10	66	49	62	70	58	55	105	188	1410	452	124	97
11	59	49	62	70	58	53	103	197	1490	449	122	111
12	59	48	62	70	58	55	109	199	1570	429	122	106
13	59	47	62	70	58	54	109	215	1580	390	129	100
14	58	46	62	70	58	54	110	289	1640	354	139	97
15	57	46	62	70	58	54	119	435	2010	328	134	95
16	57	44	62	66	58	59	123	630	1700	311	121	93
17	56	43	66	66	58	62	126	704	1500	328	114	110
18	54	43	66	66	58	64	113	587	1440	334	113	112
19	54	43	66	66	58	58	102	498	1450	276	113	106
20	54	45	66	66	55	60	104	538	1400	257	109	103
21	56	45	65	66	55	60	112	666	1430	242	107	100
22	55	45	66	66	55	65	112	716	1450	227	107	100
23	54	45	66	66	55	64	110	845	1450	213	106	97
24	54	47	66	66	55	61	111	938	1490	201	106	93
25	51	47	66	66	55	60	123	929	1240	189	110	93
26	51	47	66	62	55	60	147	912	1050	179	109	91
27	50	47	70	62	55	61	184	929	1010	172	105	90
28	50	49	70	62	55	67	188	886	992	165	104	89
29	51	49	70	62	---	70	177	910	870	173	103	88
30	59	52	70	62	---	77	182	968	839	172	102	87
31	57	---	70	62	---	93	---	975	---	159	101	---
TOTAL	1817	1453	1948	2082	1625	1861	3559	15914	38419	11134	3733	2945
MEAN	58.6	48.4	62.8	67.2	58.0	60.0	119	513	1281	359	120	98.2
MAX	89	56	70	70	62	93	188	975	2010	757	161	112
MIN	50	43	52	62	55	53	85	178	839	159	101	87
AC-FT	3600	2880	3860	4130	3220	3690	7060	31570	76200	22080	7400	5840

CAL YR 1977 TOTAL 34251 MEAN 93.8 MAX 645 MIN 43 AC-FT 67940
WTR YR 1978 TOTAL 86490 MEAN 237 MAX 2010 MIN 43 AC-FT 171600

NOTE.--NO GAGE-HEIGHT RECORD NOV. 18 TO MAR. 9.

09303500 SOUTH FORK WHITE RIVER NEAR BUFORD, CO

LOCATION.--Lat 39°55'18", long 107°33'04", in NW¼SE¼ sec.36, T.1 S., R.91 W., Rio Blanco County, Hydrologic Unit 14050005, on left bank at upstream side of county bridge, 10 ft (3 m) downstream from Peltier Creek, and 5.6 mi (9.0 km) southeast of Buford.

DRAINAGE AREA.--157 mi^2 (407 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1903 to October 1906, June 1910 to December 1915, October 1942 to September 1947, April 1967 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1057: 1944-45.

GAGE.--Water-stage recorder. Altitude of gage is 7,480 ft (2,280 m), from topographic map. July 26, 1903, to Oct. 31, 1906, nonrecording gage, and Oct. 1, 1942, to Sept. 30, 1947, water-stage recorder, at site 60 ft (18 m) upstream at different datums. Records for 1919-20 at site 6.0 mi (9.7 km) downstream not equivalent.

REMARKS.--Records good except those for winter period, which are fair. Diversions for irrigation of about 600 acres (2.43 km^2) of hay meadows above station.

AVERAGE DISCHARGE.--24 years (water years 1904-6, 1911-15, 1943-47, 1968-78), 260 ft^3/s (7.363 m^3/s), 188,400 acre-ft (232 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 3,230 ft^3/s (91.5 m^3/s) June 17, 1906, gage height, 8.2 ft (2.50 m), site and datum then in use, from rating curve extended above 1,600 ft^3/s (45 m^3/s); minimum discharge recorded, 56 ft^3/s (1.59 m^3/s) Dec. 18, 1946, gage height, 1.01 ft (0.308 m), site and datum then in use, but may have been less during periods of no gage-height record.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,200 ft^3/s (34 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	(m^3/s)	Gage height (ft)	(m)	Date	Time	Discharge (ft^3/s)	(m^3/s)	Gage height (ft)	(m)
June 16	0500	*3170	89.8	714	2.176	June 25	0500	2910	82.4	6.90	2.103

Minimum daily discharge, 60 ft^3/s (1.70 m^3/s) Dec. 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	94	91	80	90	105	94	152	212	1270	1470	215	133
2	93	88	82	92	105	94	140	212	1350	1330	212	132
3	91	91	89	94	105	92	132	241	1360	1200	197	132
4	93	91	89	94	105	92	124	252	1540	1050	190	129
5	97	91	83	95	105	92	123	248	1530	904	186	128
6	105	93	82	99	105	92	119	241	1420	816	180	126
7	120	95	82	99	105	90	124	232	1510	728	176	128
8	110	89	76	99	105	90	137	230	1560	676	172	137
9	105	70	60	99	105	90	143	219	1750	628	171	129
10	102	74	77	99	105	90	136	234	2130	588	169	125
11	97	100	66	99	105	90	136	248	2400	572	168	137
12	97	96	87	99	105	90	145	248	2390	532	166	137
13	96	90	72	99	105	90	145	265	2440	493	169	130
14	95	86	83	99	105	92	146	345	2630	448	182	126
15	95	87	83	99	100	92	155	482	2720	420	160	124
16	94	84	79	99	100	92	155	644	2870	398	166	123
17	94	83	81	99	100	92	154	772	2710	409	156	133
18	94	84	72	99	100	93	149	674	2390	412	154	140
19	94	76	68	99	98	91	146	576	2320	392	154	136
20	94	80	68	102	98	89	146	596	2180	336	151	133
21	95	84	68	102	98	90	152	680	2200	318	149	129
22	93	85	70	102	98	95	149	767	2280	300	146	128
23	91	88	73	102	96	93	145	958	2360	279	145	125
24	91	82	74	102	96	93	143	1140	2410	268	140	123
25	90	91	76	102	96	89	152	1250	2540	255	137	121
26	90	89	80	102	96	90	171	1190	2160	243	136	120
27	88	86	87	102	94	93	208	1270	1910	236	134	119
28	88	89	88	102	94	97	208	1180	1870	225	134	119
29	89	82	88	102	---	103	202	1160	1690	227	137	119
30	97	80	90	102	---	111	212	1360	1570	236	137	116
31	95	---	90	102	---	124	---	1400	---	215	134	---
TOTAL	2967	2595	2443	3075	2834	2905	4549	19526	61480	16604	5043	3837
MEAN	95.7	86.5	78.8	99.2	101	93.7	152	630	2049	536	163	128
MAX	120	100	90	102	105	124	212	1400	2870	1470	215	140
MIN	88	70	60	90	94	89	119	212	1270	215	134	116
AC-FT	5890	5150	4850	6100	5620	5760	9020	38730	121900	32930	10030	7610

CAL YR 1977 TOTAL 43375 MEAN 119 MAX 566 MIN 60 AC-FT 86030
WTR YR 1978 TOTAL 127858 MEAN 350 MAX 2870 MIN 60 AC-FT 253600

NOTE.--NO GAGE-HEIGHT RECORD DEC. 26 TO MAR. 17.

09304000 SOUTH FORK WHITE RIVER AT BUFORD, CO

LOCATION.--Lat 39°58'28", long 107°37'30", in NW¼NE¼ sec.17, T.1 S., R.91 W., Rio Blanco County, Hydrologic Unit 14050005, on left bank 300 ft (91 m) downstream from highway bridge, 0.8 mi (1.3 km) upstream from mouth, and 1.0 mi (1.6 km) south of Buford.

DRAINAGE AREA.--170 mi² (440 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1919 to December 1920 (monthly discharge only, published in WSP 1313), October 1951 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,970 ft (2,124 m), from topographic map. Prior to Nov. 30, 1920, nonrecording gage at site 300 ft (91 m) upstream at different datum.

REMARKS.--Records good except those for periods of no gage-height record, which are poor. Diversions above station for irrigation of about 1,100 acres (4.45 km²) above station and a small area below.

AVERAGE DISCHARGE.--28 years, 253 ft³/s (7.165 m³/s), 183,300 acre-ft/yr (226 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,000 ft³/s (85 m³/s) June 16, 1978; maximum gage height, 7.07 ft (2.155 m) June 30, 1957; minimum daily discharge, 60 ft³/s (1.70 m³/s) Feb. 21, 1955.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,000 ft³/s (85 m³/s) at 0700 June 16, gage height, 7.00 ft (2.134 m), only peak above base of 1,300 ft³/s (37 m³/s); minimum daily, 76 ft³/s (2.15 m³/s) Mar. 7-10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	83	92	96	94	86	78	163	234	1110	1370	215	129
2	92	89	98	94	86	78	151	234	1180	1210	210	124
3	92	93	98	94	86	78	143	258	1210	1090	195	120
4	92	93	100	92	86	78	128	270	1350	924	190	118
5	89	93	103	92	85	78	129	264	1370	802	182	116
6	93	94	83	92	85	78	123	258	1240	706	173	112
7	104	93	100	92	85	76	130	246	1320	640	165	110
8	95	92	99	92	85	76	143	237	1350	590	167	111
9	91	77	97	92	85	76	151	228	1550	545	165	103
10	91	96	99	92	85	76	143	243	1880	515	165	104
11	88	98	98	92	85	78	143	252	2220	510	163	111
12	86	99	98	92	85	80	151	255	2230	475	163	114
13	88	93	98	92	85	82	151	264	2250	434	167	108
14	87	89	98	92	82	84	155	312	2470	394	192	106
15	86	90	98	92	82	86	165	434	2520	370	185	108
16	88	87	98	92	82	88	167	600	2620	358	167	108
17	88	86	98	92	82	90	163	742	2450	362	152	118
18	87	87	96	90	82	92	157	620	2190	366	159	126
19	88	79	96	90	82	95	153	540	2140	322	157	122
20	88	83	96	90	82	97	155	550	2020	303	153	120
21	91	87	96	90	80	95	165	630	2080	285	149	114
22	91	88	96	90	80	101	159	700	2210	270	147	112
23	90	91	96	90	80	99	159	874	2360	258	145	105
24	89	85	96	88	80	99	157	1050	2340	246	137	101
25	89	94	96	88	80	94	167	1150	2400	234	137	101
26	89	92	96	88	80	95	188	1070	2050	222	135	103
27	88	89	94	88	80	97	231	1140	1780	218	130	103
28	88	92	94	88	78	101	237	1060	1740	218	129	103
29	90	92	94	88	---	106	231	1030	1590	222	130	103
30	97	94	94	88	---	111	234	1200	1440	225	133	103
31	94	---	94	88	---	126	---	1240	---	212	130	---
TOTAL	2792	2707	2993	2814	2321	2768	4892	18185	56660	14896	4987	3336
MEAN	90.1	90.2	96.5	90.8	82.9	89.3	163	587	1889	481	161	111
MAX	104	99	103	94	86	126	237	1240	2620	1370	215	129
MIN	83	77	83	88	78	76	123	228	1110	212	129	101
AC-FT	5540	5370	5940	5580	4600	5490	9700	36070	112400	29550	9890	6620

CAL YR 1977 TOTAL 45921 MEAN 126 MAX 585 MIN 70 AC-FT 91080
WTR YR 1978 TOTAL 119351 MEAN 327 MAX 2620 MIN 76 AC-FT 236700

09304000 SOUTH FORK WHITE RIVER AT BUFORD, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1976 to February 1978 (discontinued).

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)
NOV 10...	1445	100	288	7.6	1.0	5.4	9	150	23
DEC 05...	1730	107	260	8.0	1.5	10.8	6	130	27
JAN 11...	1345	93	245	8.2	2.0	12.1	6	130	33
FEB 06...	1500	85	257	8.8	3.0	11.5	14	150	27

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)
NOV 10...	42	10	2.2	.1	.9	150	0	120	26
DEC 05...	38	9.4	3.0	.1	.7	130	0	110	22
JAN 11...	38	8.8	1.8	.1	.9	120	0	98	30
FEB 06...	40	11	2.0	.1	.8	130	7	120	27

DATE	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)
NOV 10...	1.0	.1	15	171	.01	.01	.30	.31	.05
DEC 05...	1.3	.1	16	155	.11	.01	.01	.02	.01
JAN 11...	.9	.2	16	157	.17	.00	.85	.85	.06
FEB 06...	.7	.1	16	169	.02	.02	2.1	2.1	.02

DATE	TIME	ARSENIC DIS-SOLVED (UG/L AS AS)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)
DEC 05...	1730	1	10	0	8	.0	0	1.1

09304000 SOUTH FORK WHITE RIVER AT BUFORD, CO--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT				
29...	1445	122	8	2.6
DEC				
10...	1230	115	11	3.4
JAN				
10...	1330	90	1	.24
FEB				
04...	1330	144	8	2.5
MAR				
04...	1530	--	18	5.2
APR				
18...	1340	126	20	6.8
MAY				
31...	0930	520	142	199
JUN				
22...	1030	110	9	2.7
JUL				
22...	1330	101	20	5.5
AUG				
29...	1400	93	6	1.5
SEP				
26...	1400	75	2	.41

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
NOV				
10...	1500	101	19	5.2
DEC				
05...	1730	107	6	1.7
JAN				
11...	1330	93	17	4.3
FEB				
06...	1430	85	2	.46

09304150 MILLER CREEK NEAR MEEKER, CO

LOCATION.--Lat 39°55'52", long 107°46'10", in NW¼NW¼ sec.31, T.1 S., R.92 W., Rio Blanco County, Hydrologic unit 14050005, on left bank 200 ft (61 m) downstream from bridge, 1.1 mi (1.8 km) upstream from mouth, and 11 mi (18 km) southeast of Meeker.

DRAINAGE AREA.--57.6 mi² (149.2 km²).

PERIOD OF RECORD.--October 1970 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,710 ft (2,045 m), from topographic map.

REMARKS.--Records good except those for winter period, which are fair. One small diversion above station for irrigation below. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--8 years, 18.2 ft³/s (0.515 m³/s), 13,190 acre-ft/yr (16.3 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 200 ft³/s (5.66 m³/s) May 20, 1973, gage height, 3.95 ft (1.204 m), from rating curve extended above 69 ft³/s (2.0 m³/s); minimum daily, 4.6 ft³/s (0.13 m³/s) June 11, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 121 ft³/s (3.43 m³/s) at 2100 May 24, gage height, 3.64 ft (1.109 m), only peak above base of 60 ft³/s (1.7 m³/s); minimum daily, 10 ft³/s (0.28 m³/s) Sept. 9, 14, 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	14	14	13	12	12	14	12	53	14	14	11
2	14	15	15	13	12	12	14	12	50	14	14	12
3	14	15	15	13	11	13	14	12	46	14	13	12
4	14	15	15	12	12	12	13	13	45	15	13	12
5	14	14	15	12	11	13	13	14	50	16	13	12
6	14	15	14	13	12	13	13	14	41	15	12	11
7	16	15	15	12	11	13	13	14	38	14	11	12
8	15	15	15	12	12	12	13	13	36	14	12	12
9	15	14	14	12	12	12	13	13	31	13	13	10
10	15	15	14	13	12	12	13	12	31	13	13	11
11	15	15	14	12	12	12	12	13	28	13	13	11
12	15	15	14	12	12	12	12	12	27	13	13	11
13	15	15	14	12	12	12	12	13	24	13	14	11
14	14	15	14	12	12	12	12	13	20	12	15	10
15	13	15	14	12	12	12	12	18	16	12	15	10
16	13	15	14	12	12	12	12	27	16	13	17	11
17	13	15	13	12	12	12	12	31	16	16	18	11
18	13	16	14	12	12	12	12	24	17	13	15	11
19	13	16	13	12	12	13	11	20	15	13	15	13
20	13	15	13	11	12	13	11	23	13	12	15	19
21	13	18	13	11	12	13	12	32	14	12	15	19
22	13	16	13	11	12	13	12	42	14	13	15	18
23	12	16	13	11	12	13	11	73	16	13	15	19
24	12	16	13	11	12	13	11	96	15	13	16	19
25	13	15	13	12	12	13	11	90	13	13	17	18
26	13	16	13	12	12	13	11	78	12	14	14	18
27	13	15	13	12	12	13	11	75	12	13	13	18
28	13	15	13	12	12	13	11	67	13	14	13	17
29	13	15	13	12	---	13	12	68	14	15	11	17
30	15	15	13	12	---	13	12	69	14	15	11	17
31	14	---	13	12	---	13	---	61	---	14	11	---
TOTAL	427	456	426	372	333	389	365	1074	750	421	429	413
MEAN	13.8	15.2	13.7	12.0	11.9	12.5	12.2	34.6	25.0	13.6	13.8	13.8
MAX	16	18	15	13	12	13	14	96	53	16	18	19
MIN	12	14	13	11	11	12	11	12	12	12	11	10
AC-FT	847	904	845	738	661	772	724	2130	1490	835	851	819

CAL YR 1977 TOTAL 4354.8 MEAN 11.9 MAX 18 MIN 4.6 AC-FT 8640
WTR YR 1978 TOTAL 5855.0 MEAN 16.0 MAX 96 MIN 10 AC-FT 11610

09304200 WHITE RIVER ABOVE COAL CREEK, NEAR MEEKER, CO

LOCATION.--Lat 40°00'18", long 107°49'29", in NW¼NW¼ sec.3, T.1 S., R.93 W., Rio Blanco County, Hydrologic Unit 14050005, on left bank 40 ft (12 m) downstream from county road bridge, 2.3 mi (3.7 km) upstream from Coal Creek, and 5.0 mi (8.0 km) southeast of Meeker. Prior to October 1, 1976, at site 76 ft (23 m) upstream at datum 2.0 ft (0.610 m) higher.

DRAINAGE AREA.--660 mi^2 (1,710 km^2).

PERIOD OF RECORD.--October 1961 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,400 ft (1,951 m), from topographic map. Oct. 1, 1961, to Sept. 30, 1976, at site 76 ft (23 m) upstream at datum 2.0 ft (0.610 m) higher.

REMARKS.--Records good except those for winter period and period of no gage-height record, which are poor. Diversions above station for irrigation of about 8,000 acres (32.4 km^2) above station and about 4,000 acres (16.2 km^2) below. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--17 years, 541 ft^3/s (15.32 m^3/s), 392,000 acre-ft/yr (483 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,700 ft^3/s (133 m^3/s) June 6, 1975, gage height, 4.88 ft (1.487 m); maximum gage height, 5.41 ft (1.649 m) May 13, 1962; minimum daily discharge, 6.5 ft^3/s (0.18 m^3/s) July 19-21, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,040 ft^3/s (114 m^3/s) at 1000 June 25, gage height, 6.15 ft (1.875 m), only peak above base of 2,000 ft^3/s (57 m^3/s); minimum daily discharge, 54 ft^3/s (1.529 m^3/s) Oct. 1-3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54	220	237	252	220	208	348	756	2080	1930	392	205
2	54	213	237	252	220	211	352	740	2140	1700	392	194
3	54	223	237	252	220	213	359	964	2140	1550	338	157
4	55	216	237	252	220	218	365	955	2190	1380	332	137
5	69	220	237	252	210	221	371	892	2300	1180	326	128
6	90	223	237	240	210	225	378	764	2080	1010	307	120
7	117	237	237	240	210	229	383	698	2240	874	296	127
8	93	223	237	240	210	232	390	658	2190	834	307	145
9	91	179	237	240	210	237	398	634	2400	760	302	153
10	100	185	252	240	210	241	404	664	2860	711	286	152
11	95	223	252	240	210	244	419	712	3240	725	288	185
12	110	237	252	240	210	249	430	740	3190	699	295	196
13	137	213	252	230	210	253	443	865	3020	615	287	183
14	130	220	252	230	210	258	458	1210	3020	550	351	185
15	152	237	252	230	210	261	470	1700	3020	517	364	191
16	170	233	252	230	210	266	488	2170	3370	508	327	185
17	169	227	252	230	202	271	500	2410	3030	572	299	207
18	171	237	252	230	202	275	475	1780	2690	603	301	251
19	171	254	252	230	202	280	450	1450	2620	523	301	265
20	171	237	252	220	202	284	450	1510	2580	499	288	274
21	182	237	252	220	202	289	500	1780	2720	464	273	265
22	185	237	252	220	202	294	490	1910	2940	447	254	264
23	174	237	252	220	202	299	470	2360	3160	447	227	252
24	174	237	252	220	202	304	475	2690	3290	477	211	264
25	171	237	252	220	202	309	545	2650	3530	462	205	260
26	182	237	252	220	202	313	646	2340	3050	451	200	275
27	188	237	252	220	202	319	865	2440	2520	415	202	265
28	182	237	252	220	203	324	812	2190	2430	379	208	276
29	193	237	252	220	---	330	772	2150	2350	403	200	282
30	240	237	252	220	---	2940	820	2360	2130	424	198	293
31	233	---	252	220	---	341	---	2360	---	383	196	---
TOTAL	4357	6827	7677	7190	5825	10938	14726	47502	80520	22492	8773	6356
MEAN	141	228	248	232	208	353	491	1532	2684	726	283	212
MAX	240	254	252	252	220	2940	865	2690	3530	1930	392	293
MIN	54	179	237	220	202	208	348	634	2080	379	196	120
AC-FT	8640	13540	15230	14260	11550	21700	29210	94220	159700	44610	17400	12610

CAL YR 1977 TOTAL 72229.5 MEAN 198 MAX 705 MIN 6.5 AC-FT 143300
WTR YR 1978 TOTAL 223183.0 MEAN 611 MAX 3530 MIN 54 AC-FT 442700

NOTE.--NO GAGE-HEIGHT RECORD NOV. 21 TO APR. 16.

09304200 WHITE RIVER ABOVE COAL CREEK, NEAR MEEKER, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July to September 1978.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: July to September 1978.
WATER TEMPERATURES: July to September 1978.

INSTRUMENTATION.--Water-quality monitor since July 1978.

REMARKS.--Daily maximum and minimum specific-conductance data available in District Office.

EXTREMES FOR PERIOD JULY TO SEPTEMBER.--
SPECIFIC CONDUCTANCE: Maximum, 395 micromhos Aug. 25; minimum, 273 micromhos July 14.
WATER TEMPERATURES: Maximum, 20.5°C, Sept. 6; minimum, not determined.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1										---	343	364
2										---	348	367
3										---	345	369
4										---	352	370
5										---	354	377
6										---	356	381
7										---	---	383
8										---	---	385
9										---	---	381
10										---	---	383
11										---	352	379
12										---	354	374
13										---	357	387
14										276	358	390
15										283	350	393
16										287	363	393
17										288	370	389
18										284	370	373
19										297	370	373
20										301	370	382
21										304	374	385
22										308	380	385
23										310	381	387
24										314	387	391
25										316	392	390
26										319	390	389
27										324	385	389
28										---	378	385
29										---	367	384
30										---	356	383
31										345	360	---

09304200 WHITE RIVER ABOVE COAL CREEK, NEAR MEEKER, CO--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1							---	---	16.0	12.5	19.0	12.5
2							---	---	18.0	11.5	18.5	12.5
3							---	---	18.0	12.0	18.5	12.5
4							---	---	14.5	12.0	19.0	12.5
5							---	---	18.0	10.5	20.0	16.5
6							---	---	18.0	11.5	20.5	14.0
7							---	---	---	---	18.0	14.5
8							---	---	---	---	18.5	13.0
9							---	---	---	---	19.0	12.0
10							---	---	---	---	17.5	12.0
11							---	---	17.5	16.5	15.5	12.5
12							---	---	19.5	14.0	13.5	9.5
13							---	---	18.0	15.0	14.5	7.5
14							18.0	11.0	16.5	10.5	13.5	8.5
15							16.0	12.0	16.5	8.5	17.0	9.5
16							16.0	11.5	18.0	10.5	17.5	10.5
17							16.5	12.5	16.5	12.0	17.0	11.5
18							16.5	11.5	16.5	11.0	13.0	8.5
19							17.0	12.5	16.5	9.0	9.0	7.0
20							18.0	12.5	17.5	11.0	9.0	6.0
21							17.0	12.5	19.0	12.5	10.5	5.0
22							17.5	11.0	17.5	14.0	13.0	6.5
23							18.0	11.0	19.0	13.0	14.5	8.0
24							16.5	11.5	19.5	12.5	12.5	9.0
25							18.5	11.5	19.0	13.0	15.0	8.5
26							19.0	12.5	19.5	12.5	15.0	9.0
27							16.5	12.5	19.0	11.5	15.0	9.0
28							---	---	18.5	11.0	14.5	9.0
29							---	---	19.0	11.0	14.5	9.0
30							---	---	18.5	11.5	13.5	8.0
31							16.0	14.0	18.0	12.0	---	---

09304500 WHITE RIVER NEAR MEEKER, CO

LOCATION.--Lat 40°02'01", long 107°51'42", in NE¼ sec.30, T.1 N., R.93 W., Rio Blanco County, Hydrologic Unit 14050005, on left bank 1.0 mi (1.6 km) upstream from Curtis Creek and 2.5 mi (4.0 km) east of Meeker.

DRAINAGE AREA.--762 mi² (1,974 km²).

PERIOD OF RECORD.--June 1901 to December 1906, October 1909 to current year. Monthly discharge only for some periods, published in WSP 1313. Published as "at Meeker" 1901-13.

REVISED RECORDS.--WSP 764: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 6,300 ft (1,920 m), from topographic map. Prior to Oct. 31, 1906, and May 7 to Aug. 13, 1910, nonrecording gage, and Aug. 14, 1910, to Oct. 19, 1913, water-stage recorder, at site 2.5 mi (4.0 km) downstream at different datum. Oct. 20, 1913, to Sept. 30, 1971, water-stage recorder at present site, at datum 3.00 ft (0.914 m) higher prior to Oct. 1, 1933, and at datum 2.00 ft (0.610 m) higher thereafter.

REMARKS.--Records fair except those for period of no gage-height record, which are poor. Diversions above station for irrigation of about 12,000 acres (48.6 km²) above station and about 3,000 acres (12.1 km²) below. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--74 years, 618 ft³/s (17.50 m³/s), 447,700 acre-ft/yr (552 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 6,370 ft³/s (180 m³/s) June 16, 1921, gage height, 7.60 ft (2.316 m), present datum, from rating curve extended above 4,700 ft³/s (130 m³/s); minimum daily, 78 ft³/s (2.21 m³/s) July 16, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,100 ft³/s (59 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
May 24	0200	3040	86.1	5.07	1.545	June 25	1100	3420	96.9	5.32	1.622
June 16	1000	*3900	110	5.54	1.689						

Minimum daily discharge, 137 ft³/s (3.88 m³/s) Oct. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	154	244	230	231	239	253	515	822	2130	2060	495	289
2	139	234	245	231	239	253	495	822	2260	1860	490	278
3	139	241	265	231	239	253	462	970	2240	1760	454	244
4	137	241	260	231	239	253	430	1030	2330	1490	442	231
5	154	241	235	231	239	253	442	963	2420	1410	434	228
6	202	251	230	235	239	253	422	900	2200	1260	422	221
7	231	268	235	235	239	253	422	858	2360	1160	418	255
8	195	251	240	235	239	253	470	828	2330	1070	410	282
9	186	230	230	235	239	253	495	792	2560	978	398	265
10	208	220	230	235	239	253	466	840	3100	956	382	258
11	202	225	230	235	239	280	454	882	3560	978	382	289
12	211	235	230	235	253	280	490	870	3420	949	390	300
13	234	238	230	235	253	280	515	949	3330	894	390	282
14	224	240	230	235	253	280	515	1270	3490	834	438	286
15	238	258	230	235	253	280	545	1260	3510	786	458	292
16	241	258	230	235	253	280	560	2130	3650	768	410	282
17	234	255	230	239	253	280	565	2300	3490	828	386	300
18	231	261	230	239	253	280	520	1760	3190	846	382	346
19	231	278	230	239	253	280	500	1460	3040	720	386	346
20	234	244	230	239	253	280	505	1530	2840	700	370	346
21	251	261	230	239	253	310	550	1860	2750	675	354	338
22	248	278	230	239	253	310	540	2030	2830	640	342	330
23	231	272	230	239	253	310	525	2450	2930	635	326	322
24	228	272	230	239	253	310	535	2810	2990	645	326	322
25	231	275	230	239	253	310	600	2740	3190	590	322	338
26	231	286	230	239	253	351	670	2390	3600	545	318	330
27	228	272	231	239	253	351	846	2480	2510	495	314	322
28	228	289	230	239	253	351	816	2180	2440	485	310	338
29	234	272	230	239	---	351	798	2160	2350	505	300	342
30	268	272	230	239	---	386	846	2360	2180	515	296	354
31	251	---	230	239	---	422	---	2410	---	475	289	---
TOTAL	6654	7662	7231	7325	6930	9092	16514	49106	85240	28512	11834	8956
MEAN	215	255	233	236	248	293	550	1584	2841	920	382	299
MAX	268	289	265	239	253	422	846	2810	3650	2060	495	354
MIN	137	220	230	231	239	253	422	792	2130	475	289	221
AC-FT	13200	15200	14340	14530	13750	18030	32760	97400	169100	56550	23470	17760

CAL YR 1977 TOTAL 94102 MEAN 258 MAX 774 MIN 78 AC-FT 186700
WTR YR 1978 TOTAL 245056 MEAN 671 MAX 3650 MIN 137 AC-FT 486100

NOTE.--NO GAGE-HEIGHT RECORD DEC. 19 TO MAR. 29.

09304800 WHITE RIVER BELOW MEEKER, CO

LOCATION.--Lat 40°00'48", long 108°05'33", in center of sec.31, T.1 N., R.95 W., Rio Blanco County, Hydrologic Unit 14050005, on left bank 30 ft (9 m) downstream from county bridge, 4.5 mi (7.2 km) downstream from Strawberry Creek, and 10 mi (16 km) west of Meeker.

DRAINAGE AREA.--1,040 mi² (2,690 km²), approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1961 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,928 ft (1,807 m), from topographic map.

REMARKS.--Records good except those for winter period, which are fair. Diversion above station for irrigation of about 22,000 acres (89.0 km²) above station and a few small hay meadows below.

AVERAGE DISCHARGE.--17 years, 614 ft³/s (17.39 m³/s), 444,800 acre-ft/yr (548 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,750 ft³/s (135 m³/s) June 17, 1978, gage height, 4.46 ft (1.359 m); minimum daily discharge, 85 ft³/s (2.41 m³/s) June 28, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,000 ft³/s (57 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
May 17	0800	2,600	73.6	3.38	1.030	June 17	1400	*4,750	135	4.45	1.359
May 25	0700	2,900	82.1	3.54	1.079						

Minimum daily discharge, 175 ft³/s (4.96 m³/s), Oct. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	195	308	253	273	280	300	526	854	2020	2440	490	345
2	189	294	253	308	280	300	613	823	2110	2240	490	350
3	180	294	257	308	280	310	544	982	2170	2020	454	330
4	175	285	269	308	280	310	490	1030	2160	1850	442	303
5	186	265	281	312	279	310	514	982	2430	1630	442	298
6	257	290	261	312	279	310	484	894	2140	1480	405	269
7	308	316	242	312	279	321	460	830	2230	1360	400	422
8	277	303	277	312	279	312	520	795	2300	1250	395	420
9	245	273	257	310	279	312	564	718	2470	1140	395	321
10	245	245	228	310	279	326	538	739	2980	1120	390	303
11	242	298	269	310	279	316	502	781	3490	1160	380	316
12	249	308	269	310	279	316	520	781	3580	1140	395	355
13	269	277	281	310	290	316	538	809	3510	1050	390	326
14	257	281	249	310	290	303	544	1040	3580	974	448	330
15	269	294	265	310	290	290	564	1490	3790	902	538	355
16	281	285	277	310	290	269	592	1930	4010	870	460	335
17	269	285	277	300	290	277	606	2380	3990	934	415	345
18	261	290	269	300	290	308	550	1830	3990	1030	410	400
19	265	308	269	300	290	345	526	1440	3490	910	442	415
20	269	261	273	300	290	400	508	1440	3360	854	425	425
21	277	217	290	300	290	390	544	1670	3300	795	420	425
22	294	265	308	300	300	436	550	1790	3230	753	405	420
23	285	238	298	290	300	448	532	2160	3300	732	390	410
24	281	273	294	290	300	460	514	2590	3340	739	375	405
25	281	290	285	290	300	410	578	2620	3560	634	385	415
26	281	308	273	290	300	360	683	2290	3410	578	380	415
27	277	285	281	290	300	360	902	2340	2950	514	370	405
28	273	265	281	290	300	365	894	2060	2780	502	370	415
29	281	277	285	280	---	375	854	1980	2710	508	355	410
30	330	269	285	280	---	390	886	2140	2590	526	350	420
31	316	---	273	280	---	430	---	2280	---	472	345	---
TOTAL	8064	8467	8429	9305	8062	10675	17640	46488	90990	33107	12751	11103
MEAN	260	282	272	300	288	344	588	1500	3033	1068	411	370
MAX	330	316	308	312	300	460	902	2620	4010	2440	538	425
MIN	175	217	228	273	279	269	460	718	2020	472	345	269
AC-FT	15990	16790	16720	18460	15990	21170	34990	92210	180500	65670	25290	22020

CAL YR 1977 TOTAL 100534 MEAN 275 MAX 711 MIN 85 AC-FT 199400
WTR YR 1978 TOTAL 265081 MEAN 726 MAX 4010 MIN 175 AC-FT 525800

NOTE.--NO GAGE-HEIGHT RECORD DEC. 31 TO MAR. 8.

09304800 WHITE RIVER BELOW MEEKER, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1974 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO
NOV 17...	1230	296	705	8.5	4.0	12.6	280	140	77	22	42	1.1
DEC 08...	1030	315	685	8.0	.0	12.6	290	140	79	21	38	1.0
JAN 10...	1100	310	660	7.9	1.0	13.6	270	140	75	19	40	1.1
FEB 07...	1300	279	665	8.7	4.0	12.2	230	88	76	9.2	39	1.1
MAR 07...	1400	310	775	8.6	9.0	12.3	310	160	82	26	49	1.2
APR 05...	1630	539	655	8.2	9.0	9.9	270	130	68	25	45	1.2
MAY 08...	1600	785	498	8.4	9.0	11.2	220	94	60	17	21	.6
JUN 07...	1100	E2230	335	8.0	10.5	9.0	140	34	40	10	8.4	.3
JUL 11...	0930	1180	422	8.0	15.0	7.9	190	71	53	15	16	.5
AUG 15...	1300	547	650	8.4	14.0	9.3	270	100	71	22	31	.8
SEP 19...	0930	415	670	8.2	8.0	8.5	280	120	78	21	31	.8

DATE	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)
NOV 17...	1.5	170	2	140	160	45	.2	14	448	.01	.01	.08
DEC 08...	1.5	180	0	150	160	40	.2	15	445	.04	.02	.24
JAN 10...	1.5	150	0	120	190	40	.5	15	455	.06	.04	.54
FEB 07...	1.6	160	5	140	130	35	.2	15	390	.02	.00	.08
MAR 07...	2.4	180	3	150	190	49	.2	14	504	.01	.05	.24
APR 05...	2.2	170	0	140	170	34	.2	13	441	.23	.01	1.3
MAY 08...	1.4	150	2	130	110	19	.1	13	318	.05	.01	.29
JUN 07...	1.0	130	0	110	43	5.3	.1	12	184	.12	.03	.37
JUL 11...	1.5	150	0	120	77	11	.1	15	263	.03	.01	.58
AUG 15...	2.1	200	1	170	130	25	.3	17	398	.01	.00	.41
SEP 19...	1.9	200	0	160	--	31	.2	16	--	.03	.01	.48

E ESTIMATED.

09304800 WHITE RIVER BELOW MEEKER, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	PERI-PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	PERI-PHYTON BIOMASS ASH WEIGHT G/SQ M	CHLOR-A PERI-PHYTON CHROMO-GRAPHIC FLUOROM (MG/M2)	CHLOR-B PERI-PHYTON CHROMO-GRAPHIC FLUOROM (MG/M2)	BIOMASS CHLORO-PHYLL RATIO PERI-PHYTON (UNITS)
NOV 17...	.09	.10	.01	50	60	1.8	2.4	--	--	--	--	--
DEC 08...	.26	.30	.02	40	20	29	29	--	--	.000	.000	.00
JAN 10...	.58	.64	.07	50	10	3.1	.7	--	--	--	--	--
FEB 07...	.08	.10	.03	40	20	1.5	1.7	--	--	--	--	--
MAR 07...	.29	.30	.08	40	20	3.6	3.6	--	--	--	--	--
APR 05...	1.3	1.5	.39	50	20	3.1	2.7	--	--	--	--	--
MAY 08...	.30	.35	.04	20	10	3.3	3.2	--	--	--	--	--
JUN 07...	.40	.52	.18	20	100	6.0	3.0	--	--	--	--	--
JUL 11...	.59	.62	.07	30	30	4.3	3.2	--	--	--	--	--
AUG 15...	.41	.42	.06	40	30	3.8	3.4	4.33	2.91	.270	.000	--
SEP 19...	.49	.52	.07	60	60	2.9	3.7	.472	.315	.200	.010	--

DATE	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)
DEC 08...	290	0	1	1	100	300	0	0	0	1	0	0
MAY 08...	430	0	2	1	0	0	0	0	1	1	10	10

DATE	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)
DEC 08...	0	0	4	1	2	2	10	10	40	30	.0	.0
MAY 08...	0	0	2	0	5	2	10	10	30	30	.0	.0

DATE	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	CYANIDE TOTAL (MG/L AS CN)
DEC 08...	2	1	5	1	1	1	760	1000	.4	10	0	.00
MAY 08...	0	0	0	0	1	1	470	570	1.0	10	10	.00

09304800 WHITE RIVER BELOW MEEKER, CO—Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1										---	581	651
2										---	572	658
3										---	583	668
4										---	590	685
5										---	597	701
6										---	608	706
7										---	612	712
8										---	609	---
9										---	602	---
10										---	628	---
11										---	655	699
12										---	650	684
13										---	656	675
14										---	---	678
15										---	---	663
16										---	---	651
17										457	---	652
18										453	643	650
19										479	640	634
20										488	646	640
21										487	---	637
22										490	---	636
23										495	---	631
24										484	---	636
25										500	---	634
26										518	---	633
27										527	---	638
28										553	664	629
29										563	664	626
30										560	654	613
31										573	646	---

09304800 WHITE RIVER BELOW MEEKER, CO--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1							---	---	21.0	15.5	19.5	13.0
2							---	---	21.5	15.0	19.5	14.0
3							---	---	22.0	15.5	19.5	14.5
4							---	---	22.0	15.0	20.5	14.5
5							---	---	21.5	14.0	21.0	15.5
6							---	---	21.0	15.0	21.5	16.0
7							---	---	23.0	15.5	22.0	16.0
8							---	---	22.5	16.0	---	---
9							---	---	22.5	16.5	---	---
10							---	---	21.5	16.0	---	---
11							---	---	20.0	16.0	18.0	15.0
12							---	---	20.5	15.5	16.5	12.0
13							---	---	20.0	16.5	16.0	9.5
14							---	---	---	---	14.5	10.5
15							---	---	---	---	17.0	11.0
16							---	---	---	---	18.0	12.5
17							19.0	17.5	---	---	.0	14.0
18							18.0	14.5	16.0	12.0	13.5	9.5
19							20.0	15.5	18.0	10.5	10.0	8.0
20							21.5	16.0	18.0	12.0	10.0	7.0
21							20.5	16.0	---	---	12.0	6.0
22							20.5	14.5	---	---	14.0	7.5
23							21.5	14.5	---	---	16.0	9.5
24							21.0	14.5	---	---	15.5	10.5
25							21.5	15.0	---	---	16.5	11.5
26							23.0	16.0	---	---	17.0	11.0
27							23.0	16.0	---	---	16.5	10.5
28							20.5	17.0	19.5	17.0	16.5	11.0
29							22.0	16.5	19.5	13.0	16.5	11.0
30							22.5	16.5	19.5	13.0	15.5	9.5
31							20.5	16.0	18.0	14.0	---	---

09304800 WHITE RIVER BELOW MEEKER, CO--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT				
29...	1400	365	26	26
JAN				
14...	1420	330	2	1.8
FEB				
09...	1430	226	14	8.5
MAR				
02...	1530	320	31	27
23...	0900	308	38	32
APR				
07...	1545	340	68	62
14...	1515	375	32	32
MAY				
04...	1515	454	76	93
JUN				
03...	1430	823	112	249
JUL				
11...	1330	115	187	58
20...	1530	149	389	156
SEP				
30...	1130	180	62	30

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
NOV				
17...	1300	281	23	17
DEC				
08...	1300	315	60	51
JAN				
10...	1030	310	173	145
FEB				
07...	1030	279	16	12
MAR				
07...	1430	310	56	47
APR				
05...	1130	514	179	248
MAY				
08...	1330	795	49	105
JUN				
08...	0900	2380	188	1210
JUL				
11...	0900	1190	52	167
AUG				
15...	1000	550	34	50
SEP				
19...	0830	425	302	347

09306007 PICEANCE CREEK BELOW RIO BLANCO, CO

LOCATION.--Lat 39°49'34", long 108°10'57", in SE¼SE¼ sec.32, T.2 S., R.96 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 20 ft (6 m) downstream from private bridge, 1,100 ft (340 m) upstream from Stewart Gulch, and 14.3 mi (23.0 km) west of Rio Blanco.

DRAINAGE AREA.--177 mi² (458 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1974 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,366 ft (1,940 m), from topographic map.

REMARKS.--Records good. Several diversions above station for irrigation of hay meadows.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 520 ft³/s (14.7 m³/s) July 19, 1977, gage height, 7.01 ft (2.137 m), from rating based on indirect measurement; minimum daily, 0.60 ft³/s (0.017 m³/s) Aug. 9, 10, Sept. 9, 10, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 482 ft³/s (13.7 m³/s) June 6, gage height, 6.70 ft (2.042 m), only peak above base of 100 ft³/s (2.8 m³/s); minimum daily, 1.5 ft³/s (0.042 m³/s) Oct. 5, 8-10, 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.9	3.5	4.8	3.8	3.5	4.3	79	37	10	11	7.7	6.2
2	2.9	4.0	4.9	5.0	3.5	4.8	66	38	9.9	10	8.3	6.5
3	2.9	4.0	5.0	4.5	3.5	4.0	52	44	8.9	8.3	8.6	6.8
4	2.2	3.5	5.0	4.3	3.8	4.5	37	44	8.6	6.2	8.9	7.1
5	1.5	3.5	4.5	4.0	3.8	4.3	50	46	9.9	6.8	8.9	6.5
6	1.8	4.0	5.0	4.0	3.8	4.3	33	41	58	7.1	8.9	6.2
7	2.4	4.3	5.3	3.5	3.8	4.3	33	33	22	6.5	8.6	6.2
8	1.5	3.5	5.0	3.3	3.8	4.5	38	31	15	4.5	8.6	6.2
9	1.5	2.6	5.0	3.5	3.5	4.5	36	32	12	4.8	13	6.2
10	1.5	2.0	5.6	3.5	3.3	4.3	36	26	11	5.0	12	6.2
11	1.6	2.4	5.6	3.5	3.3	4.0	32	22	7.1	6.8	11	6.5
12	1.6	3.5	5.3	3.5	3.5	4.3	32	22	7.4	5.3	11	6.8
13	1.5	4.0	5.3	3.1	3.5	4.3	32	21	7.7	2.6	11	6.8
14	1.6	4.0	5.3	3.3	3.5	4.0	30	20	5.6	2.2	11	6.8
15	1.8	4.0	5.3	3.5	3.1	3.8	30	23	5.0	2.6	10	6.8
16	2.2	4.0	4.5	3.3	3.1	3.5	25	26	3.3	3.5	9.6	6.8
17	2.4	3.8	4.3	3.3	3.2	4.3	27	30	3.5	6.2	9.6	7.1
18	2.6	3.1	5.0	3.5	3.2	5.0	26	28	3.3	8.9	9.6	7.7
19	2.6	2.0	4.8	3.3	3.3	5.9	22	22	4.0	9.6	9.6	6.5
20	2.9	3.5	4.0	3.3	3.3	6.2	20	18	5.3	9.9	9.2	7.7
21	2.9	3.6	4.2	3.1	3.3	7.1	20	20	5.3	9.2	8.9	7.7
22	3.1	3.8	4.5	3.3	3.1	7.1	16	22	4.5	8.3	9.6	7.1
23	3.1	3.8	4.8	3.3	2.9	7.7	14	21	3.5	8.9	9.2	6.5
24	3.1	3.8	4.8	3.1	4.5	8.0	14	21	3.5	9.2	8.9	7.1
25	3.1	3.6	4.8	2.9	3.5	7.4	14	20	3.8	8.6	8.9	8.6
26	3.1	3.6	4.5	3.5	3.5	7.7	15	20	4.8	8.0	8.0	8.6
27	3.1	3.9	4.8	3.3	3.8	8.0	20	22	9.2	7.7	6.8	8.6
28	2.9	4.2	4.3	3.3	4.0	11	19	22	11	7.4	7.1	8.0
29	2.9	4.5	4.8	3.8	---	20	21	23	11	8.0	6.8	3.5
30	2.9	5.0	4.5	3.5	---	31	28	24	12	7.1	6.2	3.3
31	2.9	---	4.8	3.5	---	49	---	15	---	6.8	5.9	---
TOTAL	75.0	109.0	150.3	109.6	97.9	253.1	917	834	286.1	217.0	281.4	202.6
MEAN	2.42	3.63	4.85	3.54	3.50	8.16	30.6	26.9	9.54	7.00	9.08	6.75
MAX	3.1	5.0	5.6	5.0	4.5	49	79	46	58	11	13	8.6
MIN	1.5	2.0	4.0	2.9	2.9	3.5	14	15	3.3	2.2	5.9	3.3
AC-FT	149	216	298	217	194	502	1820	1650	567	430	558	402

CAL YR 1977 TOTAL 1539.42 MEAN 4.22 MAX 44 MIN .60 AC-FT 3050
WTR YR 1978 TOTAL 3533.00 MEAN 9.68 MAX 79 MIN 1.5 AC-FT 7010

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: December 1974 to current year.
pH: December 1974 to current year.
WATER TEMPERATURE: December 1974 to current year.
DISSOLVED OXYGEN: December 1974 to current year.
SUSPENDED SEDIMENT DISCHARGE: April 1974 to current year.

INSTRUMENTATION.--Automatic pumping sediment sampler since April 1974. Water-quality monitor since December 1974.

REMARKS.--Daily maximum and minimum specific-conductance data available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,690 micromhos June 21, 1976; minimum, 344 micromhos Apr. 13, 1976.
WATER TEMPERATURES: Maximum, 29.5°C July 25, 1977; minimum, freezing point on many days during winter months each year.
DISSOLVED OXYGEN: Maximum, 15.7 mg/L Oct. 8, 1975; minimum, 5.4 mg/L Apr. 29, 1977.
pH: Maximum, 9.0 units June 21, 1976; minimum, 7.0 units May 24, 1976.
SEDIMENT CONCENTRATIONS: Maximum daily, 20,300 mg/L July 20, 1974; minimum daily, 6 mg/L several days during September 1976.
SEDIMENT LOADS: Maximum daily, 4,580 tons (4,150 t) July 20, 1974; minimum daily, 0.04 ton (0.04 t) Apr. 27, 1977.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 1,470 micromhos June 13; minimum, 565 micromhos Apr. 2.
WATER TEMPERATURES: Maximum, 23.0°C July 28; minimum, freezing point on many days November to April.
DISSOLVED OXYGEN: Not determined.
pH: Maximum, 8.6 units May 17; minimum, 7.7 units Jan 7.
SEDIMENT CONCENTRATIONS: Maximum daily, 9,250 mg/L Apr. 1; minimum daily, 7 mg/L Sept. 2, 13.
SEDIMENT LOADS: Maximum daily, 1,950 tons (1,770 t) Apr. 1; minimum daily, 0.07 ton (0.06 t) July 13.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
OCT												
21...	1330	2.9	1220	8.1	9.5	15	8.9	440	0	81	57	150
NOV												
16...	1045	4.0	1120	8.2	3.5	8	9.9	400	0	75	52	140
DEC												
06...	1310	5.0	1030	8.3	1.7	7	10.2	390	0	71	50	130
JAN												
16...	1400	3.3	1050	8.4	4.0	9	10.0	380	0	74	48	130
FEB												
22...	1100	3.1	1100	8.1	1.0	5	10.8	410	0	78	52	140
MAR												
28...	1330	11	1050	7.9	14.5	12	6.8	380	0	75	47	120
APR												
18...	1130	26	825	8.3	5.5	10	9.6	330	0	68	38	80
MAY												
19...	1030	22	950	8.2	8.5	9	9.3	340	0	67	41	98
JUN												
13...	1245	7.7	1250	8.2	17.0	11	9.4	330	0	41	55	160
JUL												
26...	0930	8.0	1075	8.2	12.0	5	9.0	380	0	71	48	130
AUG												
16...	1120	9.6	1100	8.2	11.5	5	9.4	370	0	68	48	130
SEP												
13...	0945	6.8	1025	8.4	7.0	5	10.0	390	0	70	51	130

09306007 PICEANCE CREEK BELOW RIO BLANCO, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)
OCT 21...	3.1	3.4	630	0	520	190	16	1.0	17	827	1.12	6.48
NOV 16...	3.0	3.1	610	0	500	180	16	1.2	16	785	1.07	8.48
DEC 06...	2.9	2.4	570	0	470	160	13	1.2	16	729	.99	9.84
JAN 16...	2.9	2.8	540	1	440	170	17	1.2	18	731	.99	6.51
FEB 22...	3.0	2.7	610	0	500	213	15	1.3	17	819	1.11	6.86
MAR 28...	2.7	3.8	530	0	430	150	13	1.0	15	691	.94	20.5
APR 18...	1.9	2.8	400	0	330	150	9.9	.6	13	566	.77	39.7
MAY 19...	2.3	3.2	480	0	390	140	10	.7	15	616	.84	36.6
JUN 13...	3.8	4.8	520	0	430	210	15	.9	18	764	1.04	15.9
JUL 26...	2.9	2.9	540	0	440	180	16	1.1	16	733	1.00	15.8
AUG 16...	3.0	2.6	480	0	390	180	17	1.0	16	701	.95	18.2
SEP 13...	2.9	3.0	540	0	440	180	18	1.0	16	740	1.01	13.6

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	ARSENIC DIS-SOLVED (UG/L AS AS)	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)
OCT 21...	.06	.08	.36	.44	.03	.00	2	250	60	170	6.6	1.0
NOV 16...	.12	.06	.16	.22	.06	.01	2	240	110	280	4.3	.7
DEC 06...	.28	.07	.04	.11	.16	.02	3	240	30	160	4.5	2.9
JAN 16...	.40	.01	1.1	1.1	.07	.00	3	220	370	100	3.5	.9
FEB 22...	.32	.01	.54	.55	.06	.01	2	190	180	100	4.9	3.5
MAR 28...	.45	.01	.92	.93	.43	.04	2	200	20	90	5.6	--
APR 18...	1.4	.05	.66	.71	.64	.03	3	130	20	30	10	3.8
MAY 19...	.90	.04	.58	.62	.24	.01	3	150	60	50	6.4	1.7
JUN 13...	.16	.00	.30	.30	.01	.00	2	250	20	110	7.5	.8
JUL 26...	.32	.03	.73	.76	.01	.01	3	220	60	40	8.1	.3
AUG 16...	.38	.02	.42	.44	.01	.01	1	200	<10	20	9.1	.9
SEP 13...	.49	.10	.77	.87	.01	.00	2	230	60	10	8.8	.4

09306007 PICEANCE CREEK BELOW RIO BLANCO, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	COLIFORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREPTOCOCCI FECAL, (COLS. PER 100 ML)	SULFIDE DISSOLVED (MG/L AS S)	BROMIDE DISSOLVED (MG/L AS BR)	SOLIDS, RESIDUE AT 105 DEG. C, DISSOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)	ALUMINUM, DISSOLVED (UG/L AS AL)	BARIUM, DISSOLVED (UG/L AS BA)
OCT 21...	1330	--	--	--	--	--	--	--	--	--	--
DEC 06...	1310	46	K88	K9	58	.0	.1	710	2300	0	800
MAR 28...	1330	51	700	700	620	--	.1	730	480	0	400
JUN 13...	1245	15	58	58	--	--	.2	950	3	0	300
SEP 13...	0945	25	52	52	63	--	.2	--	--	10	300

DATE	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, DISSOLVED (UG/L AS CU)	LEAD, DISSOLVED (UG/L AS PB)	LITHIUM DISSOLVED (UG/L AS LI)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	SELENIUM, DISSOLVED (UG/L AS SE)	STRONTIUM, DISSOLVED (UG/L AS SR)	ZINC, DISSOLVED (UG/L AS ZN)	GROSS ALPHA, DISSOLVED (UG/L AS U-NAT)
OCT 21...	--	--	--	--	--	.0	--	--	--	--	--
DEC 06...	0	0	0	0	20	.0	4	1	1600	10	9.2
MAR 28...	0	0	2	0	20	.0	8	2	1500	0	<6.6
JUN 13...	0	15	3	15	20	.0	7	0	1700	20	17
SEP 13...	2	0	9	6	10	.5	7	1	1400	20	12

DATE	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DISSOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DISSOLVED (PCI/L AS SR/ YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/ YT-90)	RADIUM 226, DISSOLVED, RADON METHOD (PCI/L)	URANIUM NATURAL DISSOLVED (UG/L AS U)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)	OIL AND GREASE (MG/L)
OCT 21...	--	--	--	--	--	--	--	--	--	--	--
DEC 06...	140	3.1	94	2.8	83	.16	2.2	.00	3	--	0
MAR 28...	40	3.8	20	3.3	18	.11	3.3	.00	0	.00	0
JUN 13...	<.4	6.1	<.4	5.5	<.4	.09	3.7	.00	1	--	0
SEP 13...	<.4	<2.7	<.4	<2.5	<.4	.10	--	.00	0	.00	0

K BASED ON NON-IDEAL COLONY COUNT.

09306007 PICEANCE CREEK BELOW RIO BLANCO, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DI-AZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DI-ELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
MAR 28...	1330	.0	0	.7	.7	.2	.0	.1	.0	.0
SEP 13...	0945	.0	0	.0	.0	.0	.0	.1	.0	.0

DATE	HEPTA-CHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTA-CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALA-THION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHYL PARA-THION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRI-THION, TOT. IN BOTTOM MATL. (UG/KG)	PARA-THION, TOTAL IN BOTTOM MATERIAL (UG/KG)	TOXA-PHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRI-THION, TOTAL IN BOTTOM MATERIAL (UG/KG)	2,4-D, TOTAL IN BOTTOM MATERIAL (UG/KG)
MAR 28...	.0	.0	.0	.0	.0	.0	.0	0	.0	0
SEP 13...	.0	.0	.0	.0	.0	.0	.0	0	.0	0

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1070	1020	1120	1050	1200	1130	597	922	1160	1230	1180	1090
2	1080	1070	1120	1070	1200	1110	581	925	1170	1230	1170	1090
3	1110	1090	1140	1090	1190	1070	590	912	1170	1230	1170	1090
4	1140	1100	1120	1080	1080	1110	688	845	1190	1230	1170	1090
5	1170	1110	1100	1070	1100	1130	673	784	1190	1200	1160	1100
6	1130	1080	1100	1080	1090	1120	612	844	1150	1190	1150	1110
7	1030	1090	1100	1080	1070	1130	674	865	1220	1190	1140	1110
8	1100	1050	1090	1090	1090	1130	881	869	1210	1210	1150	---
9	1100	1040	1100	1070	1090	1130	849	904	1270	1210	1160	---
10	1090	1040	1100	1050	1090	1120	840	930	1270	1220	---	---
11	1060	1050	1100	1050	1150	1140	847	925	1270	1220	1120	---
12	1090	1030	1090	1070	1260	1160	860	951	1260	1200	1120	---
13	1110	---	1100	1040	1230	---	941	987	1340	1240	1110	1090
14	1130	---	1100	---	1180	---	921	978	1250	1270	1100	1070
15	1130	---	1050	---	1220	---	902	978	1260	1260	1090	1080
16	1150	1060	1120	1070	1220	---	879	967	1290	1250	1090	1080
17	1160	1160	1090	1060	1250	---	862	950	1290	1250	1090	1090
18	1160	1190	1160	1070	---	---	910	988	1290	1170	1080	1060
19	1150	1170	1170	1080	---	---	903	1090	1280	1170	1080	1040
20	1150	1090	1090	1080	---	---	908	1070	1280	1150	1080	1040
21	1120	1100	1070	1100	---	---	899	1070	1310	1140	1090	1060
22	1110	1210	1090	1120	1240	---	932	1060	1290	1140	1090	1080
23	1090	1180	1090	1120	1110	---	960	1080	1300	---	1080	1050
24	1080	1100	1090	1080	1120	---	985	1090	1290	---	1080	1080
25	1090	1130	1080	1090	1120	---	998	1070	1270	---	1080	1090
26	1100	1250	1080	1090	1130	---	1000	1080	1260	---	1070	1100
27	1110	1260	1070	1100	1120	---	948	1090	1240	1160	1090	1090
28	1120	1240	1080	1090	1110	---	934	1070	1240	1150	1080	1090
29	1120	1200	1040	1090	---	---	951	1080	1230	1150	1080	1090
30	1110	1140	1070	1090	---	649	940	1120	1230	1160	1090	1150
31	1070	---	1100	1150	---	623	---	1130	---	---	1090	---

09306007 PICEANCE CREEK BELOW RIO BLANCO, CO--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	14.5	3.0	8.0	1.0	2.5	.0	2.0	.0	7.5	2.5	6.5	3.0
2	15.0	3.0	9.5	2.5	6.5	2.0	---	---	9.0	2.5	9.0	2.0
3	14.0	6.0	10.5	3.5	7.0	4.5	.5	.0	5.5	1.0	2.5	.0
4	17.0	6.0	10.5	4.5	4.0	3.5	4.5	.0	3.5	.0	8.0	.0
5	15.0	9.0	12.0	4.5	3.5	.5	5.0	1.5	7.0	2.5	9.0	3.0
6	14.5	8.5	9.5	6.0	3.5	.0	4.0	2.0	5.0	1.0	10.5	3.0
7	14.0	7.5	10.0	6.0	5.0	.5	2.0	.0	3.0	.0	13.5	3.5
8	14.5	4.0	6.0	2.0	3.0	.0	.5	.0	7.0	.0	---	---
9	13.0	4.5	8.0	1.0	3.0	.0	5.0	.5	6.0	.5	---	---
10	10.5	4.5	7.5	1.5	5.5	1.0	5.5	2.5	5.5	.0	---	---
11	12.0	2.0	8.0	2.0	5.5	.0	6.0	2.0	6.0	.0	---	---
12	13.5	2.0	9.0	2.5	4.5	1.0	4.0	.5	---	---	---	---
13	13.5	3.0	8.5	1.5	3.5	.0	3.5	.0	---	---	---	---
14	14.0	4.0	8.0	2.0	6.0	2.0	4.5	.0	4.0	.0	---	---
15	14.0	4.0	7.5	3.0	6.0	2.0	5.0	2.5	6.0	.5	---	---
16	14.0	4.5	7.0	3.0	2.5	.0	5.0	2.5	7.5	.0	---	---
17	14.0	4.5	7.0	1.5	.5	.0	5.5	2.0	.5	.0	---	---
18	14.0	4.5	7.5	4.0	3.0	.0	5.5	1.0	---	---	---	---
19	12.5	4.0	5.5	.0	.5	.0	4.0	.0	---	---	---	---
20	12.0	5.5	.5	.0	---	---	5.5	1.0	---	---	---	---
21	11.0	7.0	2.5	.0	---	---	6.0	1.0	---	---	---	---
22	12.5	6.0	6.0	2.5	.5	.0	4.0	.0	6.5	.5	---	---
23	12.5	4.0	7.0	.5	1.0	.0	2.5	.0	7.0	.0	---	---
24	11.0	4.0	4.0	.0	4.5	.5	1.5	.0	8.0	.0	---	---
25	13.0	4.0	7.5	2.5	3.0	.0	2.0	.0	9.0	1.0	---	---
26	13.0	4.0	7.5	3.5	3.0	.0	5.0	.0	9.0	3.0	---	---
27	12.5	4.0	5.5	2.0	3.0	.0	6.0	.0	8.0	2.5	---	---
28	12.5	4.5	6.0	2.0	5.0	2.0	4.0	.0	9.5	.0	---	---
29	10.5	5.5	4.5	.5	5.5	2.5	4.0	.0	---	---	---	---
30	10.0	5.5	5.5	.5	7.5	2.0	5.0	.0	---	---	---	---
31	6.5	3.5	---	---	2.0	.0	5.0	.0	---	---	---	---

09306007 PICEANCE CREEK BELOW RIO BLANCO, CO--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	13.0	4.5	19.0	5.5	21.5	10.0	18.5	12.5	18.5	10.0
2	---	---	16.0	5.5	18.0	6.0	21.0	9.5	22.0	10.0	18.0	9.5
3	---	---	12.5	6.0	16.0	7.0	20.5	9.5	21.5	10.5	19.5	10.0
4	---	---	11.5	5.0	18.0	8.5	20.0	8.5	21.5	10.0	18.0	10.0
5	---	---	8.5	5.5	15.5	8.0	21.0	8.0	21.5	9.0	19.5	10.0
6	---	---	11.0	3.5	18.5	6.5	20.0	9.5	20.5	10.0	20.5	11.0
7	---	---	11.0	3.5	17.0	8.0	22.0	9.0	21.5	13.5	18.0	12.0
8	---	---	10.0	4.0	21.0	8.0	21.0	9.5	19.5	10.5	---	---
9	---	---	15.5	3.0	19.5	8.5	19.5	9.5	19.0	11.5	---	---
10	---	---	15.5	5.5	18.5	10.0	20.5	11.0	18.5	12.5	---	---
11	---	---	11.0	6.0	19.0	9.0	20.5	11.5	18.5	10.5	---	---
12	---	---	15.5	4.5	17.5	7.5	21.5	11.0	19.5	11.5	---	---
13	---	---	18.0	4.5	18.5	7.5	22.0	10.0	18.0	12.0	15.5	8.5
14	---	---	18.5	6.0	19.0	8.5	22.5	10.5	14.5	11.0	13.5	6.0
15	---	---	18.5	6.5	18.0	9.0	19.5	11.0	19.5	7.0	17.5	8.0
16	---	---	18.0	7.0	18.0	8.5	19.0	11.0	19.5	13.0	16.5	8.0
17	---	---	12.5	5.5	18.5	8.5	21.0	12.5	19.0	8.5	17.0	10.5
18	---	---	14.0	4.5	18.0	8.0	21.0	10.5	18.0	8.0	12.0	8.0
19	12.0	4.5	17.5	4.5	18.0	9.5	20.0	11.0	18.5	7.0	9.0	6.0
20	13.5	3.0	18.0	6.0	19.0	8.5	21.5	10.5	19.0	8.5	10.0	6.0
21	7.0	3.0	13.0	8.5	19.5	9.5	20.5	9.0	19.5	10.0	13.5	4.0
22	11.0	.0	18.0	7.0	20.0	9.5	22.0	9.5	17.0	12.0	15.0	5.0
23	13.0	3.0	18.5	8.0	20.0	9.5	---	---	20.5	10.0	17.5	6.5
24	16.5	3.5	18.0	7.0	19.5	11.0	---	---	19.0	9.0	13.5	7.0
25	12.5	6.0	15.5	6.5	17.5	10.5	---	---	19.0	10.0	16.0	7.5
26	15.0	5.5	17.5	5.5	20.5	8.5	---	---	20.0	9.5	16.0	7.0
27	9.0	6.0	15.5	7.0	20.0	9.5	22.5	15.0	19.0	8.5	15.5	7.0
28	11.5	5.0	15.5	6.5	18.0	12.0	23.0	10.0	19.0	8.5	14.5	7.0
29	12.5	5.5	16.5	6.0	16.5	11.0	19.5	11.0	18.5	8.5	14.5	7.0
30	12.0	6.0	18.5	8.0	18.0	10.5	20.0	12.0	17.5	8.5	14.0	6.5
31	---	---	18.0	7.5	---	---	---	---	17.5	10.0	---	---

09306007 PICEANCE CREEK BELOW RIO BLANCO, CO--Continued

PH (UNITS), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.1	8.1	8.1	8.2	8.2	8.2	7.8	8.2	8.2	8.2	8.1	8.1
2	8.2	8.0	8.2	8.0	8.2	8.3	7.7	8.2	8.2	8.3	8.1	8.1
3	8.2	8.0	8.2	8.2	8.2	8.3	7.6	8.2	8.2	8.3	8.1	8.1
4	8.1	8.0	8.2	8.2	8.3	8.4	7.7	8.2	8.2	8.1	8.1	8.1
5	8.1	8.0	8.2	8.2	8.2	8.3	7.9	8.3	8.2	8.2	8.1	8.1
6	8.1	8.0	8.2	8.2	8.2	8.3	7.6	8.2	8.1	8.2	8.1	8.1
7	8.1	8.0	8.2	8.3	8.3	8.3	7.9	8.1	8.1	8.2	8.1	8.1
8	8.1	8.0	8.2	8.2	8.3	8.3	8.0	8.1	8.1	8.2	8.1	---
9	8.1	8.0	8.2	8.2	8.3	---	7.9	8.1	8.1	8.2	8.1	---
10	8.1	7.9	8.2	8.2	8.3	---	8.0	8.0	8.1	8.2	8.1	---
11	8.1	8.0	8.2	8.2	8.3	---	7.9	8.1	8.1	8.2	8.1	---
12	8.1	8.1	8.2	8.2	---	---	8.1	8.0	7.8	8.2	8.1	---
13	8.0	8.1	8.2	8.3	---	---	8.3	8.0	8.2	8.2	8.1	8.3
14	8.0	8.1	8.2	8.2	8.2	---	8.3	8.0	8.3	8.1	8.2	8.3
15	8.0	8.1	8.2	8.3	8.3	---	8.2	8.0	8.2	8.1	8.2	8.2
16	8.0	8.2	8.2	8.3	8.3	---	8.3	8.0	8.2	8.1	8.1	8.1
17	8.0	8.1	8.1	8.3	8.3	---	8.3	8.1	8.2	8.1	8.2	8.1
18	8.0	8.0	8.2	8.3	---	---	8.3	8.1	8.2	8.2	8.1	8.2
19	8.0	7.9	8.2	8.3	---	---	8.2	8.2	8.2	8.2	8.1	8.2
20	8.0	8.0	---	8.3	---	---	8.3	8.2	8.2	8.2	8.1	8.2
21	8.1	8.1	---	8.3	---	---	8.3	8.1	8.2	8.2	8.1	8.2
22	8.1	7.8	8.0	8.3	8.2	---	8.3	8.2	8.1	8.2	8.1	8.1
23	8.1	7.9	8.3	8.3	8.2	---	8.2	8.2	8.2	---	8.1	8.1
24	8.1	8.2	8.3	8.3	8.2	---	8.2	8.2	8.2	---	8.1	8.1
25	8.0	8.1	8.3	8.3	8.2	---	8.2	8.2	8.2	---	8.1	8.1
26	8.0	7.8	8.3	8.3	8.2	---	8.2	8.2	8.3	---	8.1	8.1
27	8.0	7.8	8.3	8.3	8.2	---	8.2	8.3	8.2	8.0	8.1	8.1
28	8.0	7.8	8.3	8.3	8.2	---	8.2	8.1	8.2	8.1	8.1	8.1
29	8.0	7.9	8.2	8.3	---	7.8	8.1	8.2	8.2	8.1	8.1	8.0
30	8.0	8.1	8.2	8.3	---	7.8	8.2	8.0	8.2	8.1	8.1	8.0
31	8.0	---	8.3	8.2	---	---	---	8.2	---	---	8.1	---

09306007 PICEANCE CREEK BELOW RIO BLANCO, CO--Continued

DISSOLVED OXYGEN (DO), MG/L, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	15.5	5.5										
2	10.5	6.4										
3	11.6	5.8										
4	14.4	5.8										
5	9.6	5.6										
6	11.0	5.3										
7	9.3	6.0										
8	15.1	6.2										
9	11.8	6.2										
10	11.3	6.7										
11	10.8	7.8										
12	14.7	6.7										
13	16.3	5.3										
14	12.4	6.6										
15	11.1	6.2										
16	15.4	5.6										
17	14.9	6.2										
18	11.5	5.5										
19	14.1	3.9										
20	12.3	5.8										
21	8.5	6.3										
22	---	---										
23	---	---										
24	---	---										
25	---	---										
26	---	---										
27	---	---										
28	---	---										
29	---	---										
30	---	---										
31	---	---										

09306007 PICEANCE CREEK BELOW RIO BLANCO, CO--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM (70337)	SED. SUSP. FALL DIAM. % FINER THAN .004 MM (70338)
APR							
01...	1530	88	5240	1250	71	--	--
03...	1743	44	2170	258	--	22	30
18...	1100	28	755	57	97	--	--

DATE	SED. SUSP. FALL DIAM. % FINER THAN .016 MM (70340)	SED. SUSP. FALL DIAM. % FINER THAN .062 MM (70342)	SED. SUSP. FALL DIAM. % FINER THAN .125 MM (70343)	SED. SUSP. FALL DIAM. % FINER THAN .250 MM (70344)	SED. SUSP. FALL DIAM. % FINER THAN .500 MM (70345)	SED. SUSP. FALL DIAM. % FINER THAN 1.00 MM (70346)
APR						
01...	--	--	--	--	--	--
03...	50	72	81	91	99	100
18...	--	--	--	--	--	--

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	2.9	42	.33	3.5	43	.41	4.8	---	1.1
2	2.9	67	.52	4.0	62	.67	4.9	---	1.2
3	2.9	32	.25	4.0	48	.52	5.0	---	1.2
4	2.2	21	.12	3.5	32	.30	5.0	---	1.2
5	1.5	34	.14	3.5	30	.28	4.5	---	1.2
6	1.8	38	.18	4.0	100	1.1	5.0	194	2.4
7	2.4	104	1.2	4.3	55	.64	5.3	162	2.2
8	1.5	55	.22	3.5	---	.60	5.0	154	2.2
9	1.5	100	.40	2.6	---	.35	5.0	286	5.1
10	1.5	125	.51	2.0	99	.53	5.6	168	2.3
11	1.6	48	.21	2.4	104	.67	5.6	112	1.7
12	1.6	36	.16	3.5	171	1.6	5.3	91	1.4
13	1.5	47	.19	4.0	187	2.0	5.3	188	2.7
14	1.6	72	.31	4.0	169	1.8	5.3	---	1.3
15	1.8	91	.44	4.0	108	1.2	5.3	224	3.2
16	2.2	110	.65	4.0	148	1.6	4.5	264	3.2
17	2.4	104	.67	3.8	172	1.8	4.3	---	.84
18	2.6	53	.37	3.1	152	1.3	5.0	220	3.0
19	2.6	58	.41	2.0	159	.86	4.8	264	3.4
20	2.9	56	.43	3.5	---	.60	4.0	314	3.4
21	2.9	64	.50	3.6	---	.62	4.2	---	8.2
22	3.1	92	.77	3.8	---	.69	4.5	---	.95
23	3.1	109	.91	3.8	---	.69	4.8	---	1.1
24	3.1	129	1.1	3.8	---	.69	4.8	410	5.3
25	3.1	82	.69	3.6	---	.62	4.8	346	4.5
26	3.1	106	.89	3.6	---	.62	4.5	297	3.6
27	3.1	60	.50	3.9	---	.76	4.8	328	4.2
28	2.9	47	.37	4.2	---	.82	4.3	318	3.7
29	2.9	31	.24	4.5	---	.95	4.8	233	3.0
30	2.9	32	.25	5.0	---	1.2	4.5	230	2.8
31	2.9	33	.26	---	---	---	4.8	305	4.0
TOTAL	75.0	---	14.19	109.0	---	26.49	150.3	---	85.59

09306007 PICEANCE CREEK BELOW RIO BLANCO, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JANUARY			FEBRUARY			MARCH	
1	3.8	350	3.6	3.5	230	2.2	4.3	80	.93
2	5.0	325	4.4	3.5	260	2.5	4.8	150	1.9
3	4.5	250	3.0	3.5	270	2.6	4.0	1020	21
4	4.3	220	2.6	3.8	295	3.0	4.5	---	.95
5	4.0	365	3.9	3.8	340	3.5	4.3	---	.85
6	4.0	360	3.9	3.8	335	3.4	4.3	---	.85
7	3.5	255	2.4	3.8	180	1.8	4.3	---	.85
8	3.3	240	2.6	3.8	200	2.0	4.5	---	.95
9	3.5	235	2.2	3.5	230	2.2	4.5	170	2.1
10	3.5	210	2.0	3.3	260	2.3	4.3	205	2.4
11	3.5	360	3.4	3.3	205	1.8	4.0	175	1.9
12	3.5	495	4.7	3.5	180	1.7	4.3	225	2.6
13	3.1	210	1.8	3.5	170	1.6	4.3	248	2.9
14	3.3	180	1.6	3.5	155	1.5	4.0	---	.75
15	3.5	205	1.9	3.1	---	.48	3.8	---	.69
16	3.3	200	1.8	3.1	---	.48	3.5	197	3.7
17	3.3	---	.51	3.2	---	.51	4.3	---	.85
18	3.5	50	.47	3.2	---	.51	5.0	---	1.2
19	3.3	75	.67	3.3	---	.51	5.9	---	1.7
20	3.3	150	1.3	3.3	---	.51	6.2	340	5.7
21	3.1	105	.88	3.3	---	.51	7.1	385	7.4
22	3.3	55	.49	3.1	230	1.9	7.1	430	8.2
23	3.3	135	1.2	2.9	190	1.5	7.7	390	8.1
24	3.1	100	.84	4.5	242	4.8	8.0	420	9.1
25	2.9	291	5.1	3.5	195	1.8	7.4	380	7.6
26	3.5	365	3.4	3.5	170	1.6	7.7	320	6.6
27	3.3	140	1.2	3.8	180	1.8	8.0	270	5.8
28	3.3	85	.76	4.0	200	2.2	11	1760	60
29	3.8	235	4.4	---	---	---	20	3500	189
30	3.5	185	1.8	---	---	---	31	6410	665
31	3.5	175	1.6	---	---	---	49	3150	417
TOTAL	109.6	---	70.42	97.9	---	51.21	253.1	---	1438.57

09306007 PICEANCE CREEK BELOW RIO BLANCO, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	79	9250	1950	37	2000	200	10	110	3.0
2	66	---	750	38	1850	190	9.4	70	1.9
3	52	---	400	44	3470	412	8.9	125	5.6
4	37	4050	404	44	3610	429	8.6	125	2.9
5	50	---	350	46	950	118	9.9	270	7.2
6	33	---	110	41	712	79	58	210	3.3
7	33	3000	267	33	---	110	22	125	7.4
8	38	4100	421	31	760	64	15	57	2.3
9	36	---	115	32	998	86	12	90	2.9
10	36	---	115	26	902	63	11	83	2.5
11	32	---	100	22	760	45	7.1	52	1.0
12	32	4250	367	22	712	42	7.4	33	.66
13	32	2900	250	21	760	43	7.7	56	1.2
14	30	2550	206	20	760	41	5.6	60	.91
15	30	2450	198	23	869	54	5.0	48	.65
16	25	3100	209	26	888	62	3.3	31	.28
17	27	2800	204	30	898	73	3.5	26	.24
18	26	2090	147	28	722	54	3.3	30	.27
19	22	1660	986	22	532	32	4.0	48	.52
20	20	1380	74	18	447	22	5.3	46	.66
21	20	1420	77	20	432	23	5.3	50	.72
22	16	902	39	22	518	31	4.5	---	.95
23	14	808	30	21	446	25	3.5	---	.60
24	14	712	27	21	446	25	3.5	---	.60
25	14	665	25	20	350	19	3.8	---	.69
26	15	1140	46	20	240	13	4.8	32	.41
27	20	1420	77	22	300	18	9.2	---	4.2
28	19	1140	58	22	265	16	11	100	3.0
29	21	1380	78	23	380	24	11	86	2.6
30	28	---	70	24	230	15	12	---	2.6
31	---	---	---	15	155	6.3	---	---	---
TOTAL	917	---	8150	834	---	2434.3	286.1	---	61.76

09306007 PICEANCE CREEK BELOW RIO BLANCO, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JULY			AUGUST			SEPTEMBER	
1	11	82	2.4	7.7	11	.23	6.2	12	.20
2	10	---	5.2	8.3	10	.22	6.5	7	.12
3	8.3	---	3.5	8.6	---	3.6	6.8	15	.28
4	6.2	---	1.8	8.9	---	4.0	7.1	30	.58
5	6.8	58	1.1	8.9	---	4.0	6.5	34	.60
6	7.1	60	1.2	8.9	---	4.0	6.2	22	.37
7	6.5	---	2.0	8.6	10	.22	6.2	17	.28
8	4.5	38	.46	8.6	11	.26	6.2	20	.33
9	4.8	---	1.1	13	18	.63	6.2	---	1.8
10	5.0	---	1.2	12	25	.25	6.2	---	1.8
11	6.8	48	.88	11	27	.80	6.5	---	7.0
12	5.3	46	.66	11	---	6.6	6.8	---	2.2
13	2.6	10	.07	11	---	6.6	6.8	7	.13
14	2.2	30	.18	11	40	1.2	6.8	---	2.2
15	2.6	---	.35	10	22	.59	6.8	---	2.2
16	3.5	---	.60	9.6	26	.67	6.8	---	2.2
17	6.2	---	1.8	9.6	24	.62	7.1	---	2.4
18	8.9	45	1.1	9.6	---	4.8	7.7	34	.71
19	9.6	40	1.0	9.6	24	.39	6.5	---	2.0
20	9.9	34	.91	9.2	15	.37	7.7	---	2.9
21	9.2	37	.92	8.9	14	.34	7.7	---	2.9
22	8.3	---	3.3	9.6	10	.26	7.7	---	2.4
23	8.9	---	4.0	9.2	13	.32	6.5	---	2.0
24	9.2	31	.77	8.9	11	.26	7.1	---	2.4
25	8.6	40	.93	8.9	14	.34	8.6	---	3.7
26	8.0	30	.65	8.0	24	.52	8.6	70	1.6
27	7.7	31	.64	6.8	---	2.2	8.6	---	3.7
28	7.4	29	.58	7.1	38	.58	8.0	---	3.2
29	8.0	---	3.2	6.8	17	.31	3.5	---	.60
30	7.1	---	2.4	6.2	12	.20	3.3	---	.51
31	6.8	---	2.1	5.9	10	.16	---	---	---
TOTAL	217.0	---	47.00	281.4	---	45.54	203.2	---	53.31
YEAR	3533.6		12478.38						

09306015 MIDDLE FORK STEWART GULCH NEAR RIO BLANCO, CO

LOCATION.--Lat 39°47'20", long 108°10'23", in NE¼SW¼ sec.16, T.3 S., R.96 W., Rio Blanco County, Hydrologic Unit 14050006, on right bank 0.8 mi (1.3 km) upstream from confluence with East Fork and 12.8 mi (20.6 km) west of Rio Blanco.

DRAINAGE AREA.--23.8 mi^2 (61.6 km^2).

PERIOD OF RECORD.--April 1974 to September 1976, Mar. 22 to September 1978.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,592 ft (2,009.2 m), from topographic map.

REMARKS.--Records excellent. Diversions for irrigation of hay meadows above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3.2 ft^3/s (0.091 m^3/s) Feb. 9, 1976, gage height, 1.40 ft (0.427 m); no flow most days most years.

EXTREMES FOR CURRENT YEAR.--No flow during period Mar. 22 to Sept. 30.

09306022 STEWART GULCH ABOVE WEST FORK, NEAR RIO BLANCO, CO

LOCATION.--Lat 39°49'09", long 108°11'06", in SE¼NE¼ sec.5, T.3 S., R.96 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 0.6 mi (1.0 km) upstream from mouth, about 300 ft (91 m) above mouth of West Fork Stewart Gulch, and 14.2 mi (22.8 km) west of Rio Blanco.

DRAINAGE AREA.--43.4 mi² (112.4 km²), revised.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1974 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,392 ft (1,948 m), from topographic map.

REMARKS.--Records good. Diversion immediately upstream from gage for irrigation of about 20 acres (81,000 m²) of grassland.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 38 ft³/s (1.08 m³/s) July 19, 1977, gage height, 4.05 ft (1.234 m); no flow Aug. 7, 1975.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3.8 ft³/s (0.108 m³/s) at 0900 Aug. 8, due to removal of diversion dam immediately upstream, gage height, 2.90 ft (0.884 m); minimum daily, 0.01 ft³/s (<0.001 m³/s) July 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.0	1.3	1.6	1.5	1.7	1.4	1.6	1.4	1.2	1.4	.08	1.0
2	1.0	1.3	1.6	1.5	1.7	1.3	1.7	1.4	1.1	1.4	.07	1.0
3	1.0	1.3	1.6	1.5	1.7	1.2	1.7	1.5	1.2	1.4	.10	1.0
4	1.0	1.4	1.6	1.6	1.7	1.4	1.6	1.4	1.1	1.2	.13	1.0
5	1.1	1.4	1.6	1.7	1.7	1.3	1.6	1.4	1.1	1.1	.17	.82
6	1.2	1.5	1.6	1.7	1.7	1.2	1.7	1.4	1.0	1.3	.20	.82
7	1.2	1.4	1.6	1.7	1.7	1.3	1.6	1.4	1.0	1.1	.20	.82
8	1.1	1.4	1.5	1.7	1.6	1.3	1.5	1.4	1.0	1.0	.69	.87
9	1.1	1.3	1.5	1.7	1.6	1.3	1.5	1.4	1.1	1.0	.82	.87
10	1.1	1.2	1.5	1.7	1.6	1.2	1.5	1.3	1.1	1.0	.82	.87
11	1.1	1.3	1.5	1.7	1.6	1.2	1.4	1.3	1.1	.93	.82	.82
12	1.2	1.3	1.5	1.6	1.6	1.3	1.4	1.2	1.1	.87	.87	.82
13	1.1	1.3	1.6	1.5	1.6	1.4	1.4	1.2	1.1	.87	1.0	.76
14	1.1	1.4	1.6	1.5	1.6	1.5	1.2	1.2	1.0	.76	.93	.76
15	1.1	1.4	1.6	1.6	1.6	1.5	1.3	1.2	1.0	.76	.93	.72
16	1.1	1.3	1.6	1.6	1.6	1.5	1.3	1.2	.93	.66	.93	.72
17	1.2	1.3	1.6	1.6	1.5	1.6	1.3	1.2	1.0	.62	.93	.82
18	1.2	1.4	1.6	1.6	1.5	1.5	1.3	1.2	1.0	.57	.93	.82
19	1.2	1.4	1.6	1.6	1.5	1.6	1.2	1.3	1.1	.57	1.0	.82
20	1.2	1.4	1.6	1.6	1.5	1.4	1.1	1.3	1.3	.49	1.0	.87
21	1.3	1.5	1.6	1.6	1.5	1.4	1.2	1.4	.93	.49	1.0	.82
22	1.3	1.5	1.6	1.6	1.5	1.5	1.2	1.4	1.0	.53	1.0	.82
23	1.3	1.5	1.5	1.7	1.5	1.5	1.2	1.2	1.0	.57	1.0	.82
24	1.3	1.5	1.5	1.7	1.5	1.5	1.2	1.3	1.0	.57	.93	.82
25	1.3	1.5	1.4	1.6	1.5	1.6	1.3	1.3	1.3	.38	1.0	.82
26	1.4	1.5	1.4	1.6	1.3	1.5	1.3	1.3	1.4	.07	1.0	.82
27	1.3	1.5	1.4	1.7	1.4	1.5	1.3	1.3	1.5	.02	1.0	.82
28	1.4	1.6	1.5	1.7	1.4	1.5	1.3	1.3	1.3	.01	1.0	.82
29	1.4	1.6	1.5	1.7	---	1.6	1.4	1.3	1.2	.02	1.0	.82
30	1.4	1.6	1.5	1.7	---	1.6	1.4	1.3	1.3	.02	1.0	.87
31	1.4	---	1.5	1.7	---	1.6	---	1.2	---	.05	1.0	---
TOTAL	37.1	42.3	47.9	50.5	43.9	44.2	41.7	40.6	33.46	21.73	23.55	25.25
MEAN	1.20	1.41	1.55	1.63	1.57	1.43	1.39	1.31	1.12	.70	.76	.84
MAX	1.4	1.6	1.6	1.7	1.7	1.6	1.7	1.5	1.5	1.4	1.0	1.0
MIN	1.0	1.2	1.4	1.5	1.3	1.2	1.1	1.2	.93	.01	.07	.72
AC-FT	74	84	95	100	87	88	83	81	66	43	47	50

CAL YR 1977 TOTAL 494.38 MEAN 1.35 MAX 3.3 MIN .10 AC-FT 981
WTR YR 1978 TOTAL 452.19 MEAN 1.24 MAX 1.7 MIN .01 AC-FT 897

09306022 STEWART GULCH ABOVE WEST FORK, NEAR RIO BLANCO, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1974 to current year.
WATER TEMPERATURE: October 1974 to current year.
SUSPENDED-SEDIMENT DISCHARGE: October 1974 to current year.

INSTRUMENTATION.--Water-quality monitor since October 1974. Pumping sediment sampler since October 1974.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 2,200 micromhos Nov. 10, 1975; minimum, 635 micromhos Sept. 3, 1977.
WATER TEMPERATURES: Maximum, 20.5°C July 3, 1976, June 3, 1977; minimum, 0.5°C Jan. 9, 1977.
DISSOLVED OXYGEN: Maximum, 16.6 mg/L Jan. 13, 1976; minimum, 3.6 mg/L Aug. 19, 20, 1977.
pH: Maximum, 8.7 units June 24, 1976; minimum, 7.6 units Oct. 7, 1975.
SEDIMENT CONCENTRATIONS: Maximum daily, 1,350 mg/: June 8, 1975; minimum daily, no flow Aug. 7-9, 1975.
SEDIMENT LOADS: Maximum daily, 10 tons, estimated (9.1 t) June 8, 1975; minimum daily, no flow Aug. 7-9, 1975.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 1,460 micromhos Sept. 18; minimum, not determined.
WATER TEMPERATURES: Maximum, 20.0°C May 12; minimum, 0.5°C Dec. 17, Mar. 3.
DISSOLVED OXYGEN: Maximum, 15.7 mg/L Aug. 7; minimum, 2.2 mg/L July 1, 2.
pH: Maximum, 8.6 units Sept. 29, 30; minimum, 7.8 units Oct. 6.
SEDIMENT CONCENTRATIONS: Maximum daily, 275 mg/L Dec. 20; minimum daily, 3 mg/L Oct. 12.
SEDIMENT LOADS: Maximum daily, 1.2 tons (1.1 t), Dec. 20; minimum daily, less than 0.005 ton (0.005 t) many days during July and August.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
OCT												
21...	1145	1.3	1300	8.3	9.0	5	11.0	550	130	90	79	130
NOV												
16...	0845	1.3	1270	8.3	3.5	3	10.3	550	170	95	77	120
DEC												
06...	1100	1.6	1260	8.2	4.5	3	10.8	560	170	94	79	120
JAN												
17...	1230	1.6	1250	8.2	8.0	4	10.6	550	140	89	79	130
FEB												
22...	0900	1.5	1350	8.1	4.0	1	9.6	560	140	94	79	110
MAR												
28...	1000	1.5	1250	7.9	13.0	3	8.6	550	130	91	78	120
APR												
18...	1000	1.2	1200	8.0	10.0	2	8.9	550	160	94	76	120
MAY												
19...	0900	1.2	1300	8.3	7.0	1	8.4	540	120	88	78	120
JUN												
14...	0830	1.0	1300	8.4	8.0	2	6.7	580	170	97	80	130
JUL												
26...	1245	E.10	1300	8.1	16.0	8	6.4	570	130	95	80	130
AUG												
16...	1030	.77	1350	8.3	9.5	2	8.1	540	120	92	76	130
SEP												
12...	1145	.75	1450	8.4	10.5	2	8.6	550	160	94	75	120

E ESTIMATED.

09306022 STEWART GULCH ABOVE WEST FORK, NEAR RIO BLANCO, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)
OCT 21...	2.4	1.5	510	0	420	360	6.6	.3	15	939	1.28	3.30
NOV 16...	2.2	1.3	470	0	390	380	6.8	.3	16	934	1.27	3.28
DEC 06...	2.2	1.3	480	0	390	360	7.1	.3	16	924	1.26	3.99
JAN 17...	2.4	1.7	500	0	410	370	7.4	.3	15	945	1.29	4.08
FEB 22...	2.0	1.4	510	0	420	350	7.2	.3	15	914	1.24	3.70
MAR 28...	2.2	1.5	520	0	430	330	6.5	.2	15	907	1.23	3.67
APR 18...	2.2	1.6	470	0	390	350	7.3	.2	13	899	1.22	2.91
MAY 19...	2.2	1.5	510	0	420	350	7.1	.3	15	916	1.25	2.97
JUN 14...	2.4	1.8	490	0	400	370	7.2	.3	15	950	1.29	2.56
JUL 26...	2.4	4.8	530	0	430	360	7.4	.3	16	958	1.30	--
AUG 16...	2.4	1.5	510	0	420	360	6.6	.3	16	938	1.28	1.95
SEP 12...	2.2	1.5	470	0	390	370	6.7	.2	16	922	1.25	1.87

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	ARSENIC DIS-SOLVED (UG/L AS AS)	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)
OCT 21...	1.0	.08	.16	.24	.00	.03	2	80	10	30	2.7	2.0
NOV 16...	1.2	.04	.24	.28	.02	.00	2	100	50	0	2.0	.7
DEC 06...	1.4	.00	.04	.04	.02	.01	1	90	10	20	2.4	.9
JAN 17...	1.3	.06	.72	.78	.02	.02	1	80	30	0	2.1	.4
FEB 22...	1.2	.01	.32	.33	.07	.00	1	90	10	30	4.1	>5.0
MAR 28...	1.2	.00	.19	.19	.09	.02	1	80	10	10	2.7	1.7
APR 18...	1.1	.03	.49	.52	.01	.02	1	80	10	20	3.7	1.8
MAY 19...	1.1	.03	.30	.33	.03	.01	1	80	10	10	2.3	--
JUN 14...	.90	.00	.59	.59	.01	.00	1	80	30	0	4.6	1.0
JUL 26...	.72	.05	.58	.63	.03	.01	2	90	40	10	6.9	1.0
AUG 16...	1.0	.02	.30	.32	.02	.00	1	90	<10	2	2.5	.4
SEP 12...	.97	.01	.21	.22	.03	.00	2	70	20	10	6.0	.2

09306022 STEWART GULCH ABOVE WEST FORK, NEAR RIO BLANCO, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	COLIFORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREPTOCOCCI FECAL, (COLS. PER 100 ML)	SULFIDE DISSOLVED (MG/L AS S)	BROMIDE DISSOLVED (MG/L AS BR)	SOLIDS, RESIDUE AT 105 DEG. C, DISSOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)	ALUMINUM, DISSOLVED (UG/L AS AL)	BARIUM, DISSOLVED (UG/L AS BA)
DEC											
06...	1100	6	--	K68	27	.0	.1	940	34	0	500
MAR											
28...	1000	17	K200	K5	25	--	.1	1000	73	0	200
JUN											
14...	0830	16		150	--	--	.1	1020	1	0	200
SEP											
12...	1145	19	--	54	K490	--	.1	--	--	10	200

DATE	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, DISSOLVED (UG/L AS CU)	LEAD, DISSOLVED (UG/L AS PB)	LITHIUM DISSOLVED (UG/L AS LI)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	SELENIUM, DISSOLVED (UG/L AS SE)	STRONTIUM, DISSOLVED (UG/L AS SR)	ZINC, DISSOLVED (UG/L AS ZN)	GROSS ALPHA, DISSOLVED (UG/L AS U-NAT)
DEC											
06...	1	0	1	1	10	.0	1	2	2900	10	<9.9
MAR											
28...	0	10	0	3	20	.0	4	1	2700	10	<8.7
JUN											
14...	1	0	3	9	10	.2	2	1	2800	30	<11
SEP											
12...	1	10	0	0	0	.0	3	1	2200	10	<8.0

DATE	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DISSOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DISSOLVED (PCI/L AS SR/ YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/ YT-90)	RADIUM 226, DISSOLVED, RADON METHOD (PCI/L)	URANIUM NATURAL DISSOLVED (UG/L AS U)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)	OIL AND GREASE (MG/L)
DEC											
06...	2.0	<2.5	1.6	<2.2	1.6	.09	2.1	.00	2	--	0
MAR											
28...	4.7	<2.2	3.3	<1.9	3.0	.29	2.6	.00	0	.00	0
JUN											
14...	<.4	<2.8	<.4	<2.5	<.4	.06	2.6	.00	1	--	0
SEP											
12...	<.4	<5.0	<.4	<4.6	<.4	.71	--	.00	0	.00	0

DATE	TIME	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
MAR										
28...	1000	.0	0	.0	.0	.0	.0	.0	.0	.0
SEP										
12...	1145	.0	0	.0	.1	.0	.0	.0	.0	.0

K BASED ON NON-IDEAL COLONY COUNT.

09306022 STEWART GULCH ABOVE WEST FORK, NEAR RIO BLANCO, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	HEPTA-CHLOR, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	HEPTA-CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	MALA-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	METHYL PARA-THION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRI-THION, TOT. IN BOTTOM MATL. (UG/KG)	PARA-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	TOXA-PHENE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	TRI-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	2,4-D, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
MAR 28...	.0	.0	.0	.0	.0	.0	.0	0	.0	0
SEP 12...	.0	.0	.0	.0	.0	.0	.0	0	.0	0

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1270	---					---	1320	1350	1370	1380	1380
2	1270	---					---	1320	1350	1370	1380	1380
3	1270	---					---	1320	1350	1370	1380	1380
4	1270	---					---	1320	1350	1370	1380	1380
5	1270	1340					---	1320	1340	1370	1380	1380
6	---	1330					---	1320	1350	1360	1380	1380
7	---	1340					---	1320	1350	1360	1380	1380
8	---	---					---	1320	1350	1360	1380	---
9	---	---					---	1320	1350	1360	1380	---
10	---	---					---	1320	1350	1360	1380	---
11	---	---					---	1320	1350	1360	1380	---
12	---	---					1300	1320	1350	1360	1380	1390
13	---	---					1310	1320	1350	1360	1380	1390
14	---	---					1320	1320	1350	1360	1380	1390
15	---	---					1320	1320	1350	1360	1380	1390
16	---	---					1320	1310	1350	1360	1380	1390
17	---	---					1320	1320	1350	1360	1380	1390
18	---	---					1320	1320	1350	1360	1380	1410
19	---	---					1320	1350	1360	1360	1380	1390
20	---	---					1320	1350	1360	1360	1380	1390
21	1260	---					1320	1340	1360	1360	1380	1390
22	---	---					1320	1350	1360	1360	1380	1390
23	---	---					1320	1350	1360	1360	1380	1390
24	---	---					1320	1350	1360	1360	1380	1390
25	---	---					1320	1350	1360	1360	1380	1390
26	---	---					1320	1350	1360	1410	1380	1390
27	---	---					1320	1350	1360	1390	1380	1390
28	---	---					1310	1350	1360	1390	1380	1390
29	---	---					1310	1350	1360	1390	1380	1390
30	---	---					1310	1350	1370	1390	1380	1390
31	---	---					---	1350	---	---	1380	---

09306024 STEWART GULCH ABOVE WEST FORK, NEAR RIO BLANCO, CO--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	12.5	4.0	10.5	2.0	---	---	---	---	---	---	9.0	5.5
2	13.5	4.0	12.5	2.5	---	---	---	---	---	---	11.5	4.5
3	14.0	6.5	12.5	3.0	---	---	---	---	---	---	8.5	.5
4	14.5	6.0	12.5	4.0	---	---	---	---	---	---	12.0	2.5
5	13.0	8.0	13.0	4.5	---	---	---	---	---	---	11.5	5.0
6	12.5	8.0	10.5	6.0	6.5	3.5	---	---	---	---	12.0	5.5
7	13.0	6.5	11.5	5.5	8.5	3.5	---	---	---	---	14.0	4.5
8	13.0	4.5	---	---	7.5	2.5	---	---	---	---	13.5	4.0
9	12.5	5.0	---	---	7.5	2.0	---	---	---	---	14.0	4.5
10	9.5	4.5	---	---	9.5	4.0	---	---	---	---	12.0	5.0
11	11.5	3.0	---	---	9.5	3.0	---	---	---	---	12.0	5.5
12	12.5	3.0	---	---	8.0	4.0	---	---	---	---	10.0	5.5
13	13.0	3.5	---	---	8.5	2.5	---	---	---	---	11.0	2.5
14	13.5	4.0	---	---	9.5	4.5	---	---	---	---	10.5	3.0
15	13.5	4.0	---	---	9.0	4.0	---	---	---	---	13.0	2.0
16	10.5	4.0	---	---	6.0	1.0	---	---	---	---	13.5	2.0
17	---	---	---	---	6.5	.5	8.5	5.5	---	---	14.5	3.5
18	---	---	---	---	6.5	3.0	9.0	4.0	---	---	14.5	4.0
19	---	---	---	---	6.5	1.5	8.0	2.5	---	---	12.0	5.0
20	---	---	---	---	---	---	8.0	5.0	---	---	14.5	5.0
21	10.5	5.5	---	---	---	---	9.5	3.5	---	---	16.0	4.5
22	12.5	5.0	---	---	---	---	9.0	3.0	12.5	3.5	10.5	6.0
23	13.0	3.5	---	---	---	---	6.5	3.5	12.5	2.5	11.0	6.0
24	11.5	3.5	---	---	---	---	8.0	2.5	12.5	2.5	12.5	1.5
25	14.0	3.5	---	---	---	---	8.5	2.5	11.5	4.5	15.5	4.0
26	13.5	3.5	---	---	---	---	7.5	4.0	11.5	5.5	16.0	4.5
27	13.5	3.5	---	---	---	---	9.0	2.0	12.0	3.5	16.5	5.0
28	13.5	4.0	---	---	---	---	9.0	2.0	12.0	4.0	11.5	5.5
29	6.5	4.5	---	---	---	---	10.0	4.0	---	---	---	---
30	10.5	5.0	---	---	---	---	10.0	3.0	---	---	---	---
31	7.0	3.0	---	---	---	---	---	---	---	---	---	---

09306022 STEWART GULCH ABOVE WEST FORK, NEAR RIO BLANCO, CO--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	17.5	6.5	17.5	5.5	17.5	7.5	15.5	9.0	14.0	8.0
2	---	---	14.5	6.5	15.5	6.0	17.5	7.0	17.5	8.0	14.5	7.5
3	---	---	14.5	6.0	14.5	6.5	17.0	7.0	17.5	8.0	13.5	7.5
4	---	---	10.5	6.0	16.0	8.0	16.5	6.5	17.0	7.5	14.0	7.5
5	---	---	13.0	6.0	15.0	7.0	17.0	6.5	17.5	7.0	14.0	7.5
6	---	---	12.5	5.0	17.0	6.5	16.5	7.5	16.5	7.5	15.5	8.0
7	---	---	12.0	6.0	16.0	7.0	17.5	7.5	17.5	8.0	15.0	8.0
8	---	---	18.0	5.0	18.5	7.0	17.5	7.0	15.0	8.0	---	---
9	---	---	18.0	6.0	18.5	7.0	17.0	7.5	15.0	8.5	---	---
10	---	---	12.5	6.5	17.5	8.0	17.0	8.5	14.0	8.5	---	---
11	---	---	17.0	5.5	17.0	7.5	16.5	9.0	13.5	8.5	---	---
12	15.5	7.0	20.0	5.5	16.5	6.5	17.5	8.5	15.0	9.0	12.0	7.5
13	16.5	6.5	19.0	6.5	18.0	7.0	17.5	7.0	13.0	9.5	13.0	5.0
14	15.5	6.0	19.0	6.5	17.0	9.0	16.5	7.5	10.5	8.5	11.5	5.5
15	15.0	5.5	18.0	7.0	18.0	7.0	15.5	8.0	14.0	6.5	14.0	7.0
16	10.5	5.0	14.0	6.0	17.5	7.0	15.0	8.5	9.5	7.0	13.5	6.5
17	15.5	4.0	15.5	6.0	17.0	7.0	16.0	9.5	14.5	8.0	14.0	8.5
18	10.0	4.0	8.5	5.5	17.0	6.5	16.0	8.5	14.5	7.0	10.0	7.0
19	17.0	4.5	16.0	7.5	17.0	7.5	15.5	9.0	13.0	7.0	9.5	6.5
20	12.0	5.0	17.5	6.0	17.5	6.5	---	---	13.5	6.0	9.5	6.0
21	15.0	4.0	13.0	8.0	17.0	7.0	16.5	7.5	14.5	7.5	12.0	4.0
22	15.5	5.0	17.0	7.0	18.0	7.5	16.5	7.5	14.5	8.0	13.0	5.0
23	17.5	5.0	17.5	7.0	18.0	7.5	16.5	7.5	13.5	9.0	13.5	6.0
24	13.0	6.5	17.5	6.5	18.0	9.0	14.5	8.0	15.0	8.0	12.0	6.0
25	18.0	6.5	16.0	7.0	15.0	8.0	18.5	8.0	14.0	7.5	13.5	6.5
26	12.5	6.5	17.0	6.0	17.0	7.0	18.5	11.0	14.0	8.0	13.5	6.0
27	13.5	6.5	16.0	7.0	16.5	7.5	18.0	8.0	15.0	7.5	13.5	6.0
28	13.0	6.5	16.5	6.5	15.0	9.0	16.5	9.0	14.0	6.5	12.5	6.0
29	13.0	7.0	17.5	6.0	13.0	8.5	15.5	9.5	14.5	6.5	13.0	6.5
30	14.0	6.0	16.5	7.0	15.0	8.0	18.0	9.0	14.0	6.5	13.0	5.0
31	---	---	16.5	7.5	---	---	14.5	8.0	13.5	6.5	---	---

09306022 STEWART GULCH ABOVE WEST FORK, NEAR RIO BLANCO, CO--Continued

PH (UNITS), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.1	8.2	---	---	---	8.1	---	8.2	8.2	8.2	8.3	8.4
2	8.1	8.1	---	---	---	8.1	---	8.2	8.2	8.2	8.3	8.4
3	8.1	8.0	---	---	---	8.1	---	8.2	8.2	8.2	8.3	8.4
4	8.1	8.1	---	---	---	8.1	---	8.2	8.2	8.3	8.3	8.4
5	8.0	8.1	---	---	---	8.1	---	8.2	8.2	8.3	8.3	8.4
6	8.0	8.1	8.3	---	---	8.1	---	8.2	8.2	8.3	8.4	8.4
7	8.0	8.1	8.2	---	---	8.1	---	8.2	8.2	8.3	8.3	8.4
8	8.1	---	8.2	---	---	8.1	---	8.2	8.2	8.3	8.3	---
9	8.1	---	8.2	---	---	8.1	---	8.2	8.2	8.3	8.4	---
10	8.1	---	8.2	---	---	8.1	---	8.2	8.2	8.3	8.4	---
11	8.1	---	8.2	---	---	8.1	---	8.2	8.2	8.3	8.4	---
12	8.1	---	8.2	---	---	8.1	8.1	8.2	8.2	8.3	8.4	8.5
13	8.1	---	8.2	---	---	8.2	8.2	8.2	8.2	8.3	8.3	8.5
14	8.1	---	8.2	---	---	8.2	8.2	8.2	8.2	8.3	8.4	8.5
15	8.1	---	8.2	---	---	8.2	8.2	8.2	8.2	8.3	8.4	8.5
16	8.1	---	8.3	---	---	8.1	8.2	8.3	8.2	8.3	8.4	8.5
17	---	---	8.3	8.2	---	8.1	8.2	8.2	8.2	8.3	8.4	8.5
18	---	---	8.2	8.2	---	8.1	8.2	8.3	8.2	8.3	8.4	8.4
19	---	---	8.3	8.2	---	8.1	8.2	8.2	8.2	8.3	8.4	8.4
20	---	---	---	8.2	---	8.1	8.2	8.2	8.2	8.3	8.4	8.4
21	8.1	---	---	8.2	---	8.1	8.2	8.2	8.2	8.4	8.4	8.4
22	8.1	---	---	8.2	8.1	8.1	8.2	8.2	8.2	8.3	8.4	8.4
23	8.1	---	---	8.2	8.1	8.1	8.2	8.2	8.2	8.3	8.4	8.4
24	8.1	---	---	8.2	8.1	8.1	8.2	8.2	8.2	8.3	8.4	8.5
25	8.1	---	---	8.2	8.1	8.1	8.2	8.2	8.2	8.3	8.4	8.5
26	8.1	---	---	8.2	8.1	8.1	8.2	8.2	8.2	8.2	8.4	8.5
27	8.1	---	---	8.2	8.1	8.1	8.2	8.2	8.2	8.3	8.4	8.5
28	8.1	---	---	8.2	8.1	8.1	8.2	8.2	8.2	8.3	8.4	8.5
29	8.0	---	---	8.2	---	---	8.2	8.2	8.2	8.2	8.4	8.5
30	8.1	---	---	8.2	---	---	8.2	8.2	8.2	8.3	8.4	8.5
31	8.1	---	---	8.2	---	---	---	8.2	---	---	8.4	---

09306022 STEWART GULCH ABOVE WEST FORK, NEAR RIO BLANCO, CO--Continued

DISSOLVED OXYGEN (DO), MG/L, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	10.1	6.6	12.4	7.4	---	---						
2	10.1	6.3	11.7	6.8	---	---						
3	10.0	6.2	11.8	6.8	---	---						
4	9.8	6.1	12.3	6.8	---	---						
5	10.3	6.0	13.6	6.6	---	---						
6	10.1	5.1	12.9	6.6	11.6	8.3						
7	10.2	5.5	13.1	6.9	11.7	8.1						
8	10.3	6.3	---	---	12.1	8.2						
9	10.9	6.2	---	---	12.6	8.3						
10	11.0	6.8	---	---	12.5	8.3						
11	10.8	6.8	---	---	12.6	8.1						
12	10.8	6.4	---	---	12.8	8.2						
13	11.0	6.3	---	---	13.1	8.3						
14	11.2	6.2	---	---	13.1	8.1						
15	11.2	6.1	---	---	13.4	7.8						
16	11.4	7.2	---	---	12.7	8.4						
17	---	---	---	---	---	---						
18	---	---	---	---	---	---						
19	---	---	---	---	---	---						
20	---	---	---	---	---	---						
21	11.5	6.6	---	---	---	---						
22	12.5	6.2	---	---	---	---						
23	11.9	6.2	---	---	---	---						
24	12.1	6.5	---	---	---	---						
25	11.5	6.1	---	---	---	---						
26	11.5	6.2	---	---	---	---						
27	11.7	6.3	---	---	---	---						
28	12.1	6.2	---	---	---	---						
29	8.6	7.2	---	---	---	---						
30	12.1	6.6	---	---	---	---						
31	12.0	7.3	---	---	---	---						

09306022 STEWART GULCH ABOVE WEST FORK, NEAR RIO BLANCO, CO--Continued

DISSOLVED OXYGEN (DO), MG/L, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	9.4	6.2	7.5	4.7	5.1	2.2	9.6	4.2	7.5	5.1
2	---	---	8.5	6.0	7.4	4.9	5.2	2.2	10.5	3.6	8.6	6.0
3	---	---	8.9	6.5	7.1	5.2	5.3	2.3	12.0	3.5	8.6	5.5
4	---	---	8.8	6.7	7.0	4.9	5.5	2.4	13.3	3.7	8.4	5.3
5	---	---	9.2	6.7	6.9	4.6	5.7	2.4	14.3	3.8	8.4	5.4
6	---	---	8.8	6.6	7.1	4.6	5.1	3.1	15.4	3.8	8.2	5.0
7	---	---	8.8	6.8	6.9	4.7	5.8	3.4	15.7	3.3	8.1	5.9
8	---	---	8.9	6.3	7.0	4.2	6.0	3.6	8.9	3.3	---	---
9	---	---	8.5	6.0	6.7	4.1	5.8	3.7	8.0	6.0	---	---
10	---	---	8.3	6.3	6.4	4.3	5.6	3.6	7.9	5.8	---	---
11	---	---	8.8	6.4	6.7	4.5	5.3	3.4	8.0	5.8	---	---
12	7.6	6.7	8.5	5.6	7.1	4.3	5.6	3.5	8.0	5.7	9.1	6.4
13	7.5	6.8	7.8	5.4	6.6	4.1	6.0	3.5	7.2	5.4	9.8	6.2
14	8.6	6.9	7.5	5.2	6.5	4.0	5.9	3.7	7.0	5.6	9.5	6.1
15	8.6	6.9	7.3	5.2	6.5	4.0	5.7	4.0	8.6	5.8	9.0	5.7
16	9.5	7.6	7.9	6.1	6.5	4.0	5.5	3.4	8.1	6.8	9.0	5.6
17	9.5	7.6	8.0	6.0	6.8	4.2	5.2	2.9	8.1	5.6	8.6	5.3
18	9.5	6.9	8.1	7.1	6.8	3.8	5.4	3.6	8.0	5.6	8.5	4.2
19	9.2	6.9	7.8	5.6	6.2	3.7	7.3	3.7	8.4	6.1	9.8	6.3
20	9.3	7.5	7.9	5.3	6.6	3.6	6.5	2.4	8.7	5.8	9.4	6.8
21	9.5	7.2	7.4	5.5	6.1	3.4	8.1	3.4	8.1	5.7	10.0	6.2
22	9.4	6.9	7.4	5.4	5.9	3.3	9.7	2.9	7.9	5.6	9.6	5.8
23	9.5	6.5	7.2	4.9	5.7	3.2	9.5	2.7	7.8	5.7	9.4	5.7
24	9.4	6.8	7.2	5.0	5.3	2.8	9.1	4.0	7.6	5.3	9.2	5.6
25	8.9	6.1	7.3	5.6	5.3	3.3	---	---	7.9	5.5	9.1	5.4
26	9.2	6.8	7.6	5.0	6.0	2.9	6.1	3.8	7.9	5.5	9.1	5.4
27	9.7	6.6	7.3	5.5	5.3	2.9	7.8	4.1	7.7	5.4	9.3	5.4
28	9.1	6.4	7.4	5.2	4.8	3.2	7.5	3.6	8.1	5.6	8.9	5.4
29	9.5	6.1	7.4	4.7	5.3	3.1	7.9	3.5	8.1	5.5	8.8	5.3
30	9.2	6.0	7.1	4.9	5.1	2.7	8.1	3.8	8.0	5.4	9.2	5.3
31	---	---	7.3	5.0	---	---	---	---	8.0	5.3	---	---

09306022 STEWART GULCH ABOVE WEST FORK, NEAR RIO BLANCO, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	1.0	10	.03	1.3	---	.16	1.6	---	.10
2	1.0	12	.03	1.3	48	.17	1.6	---	.10
3	1.0	6	.02	1.3	---	.18	1.6	---	.15
4	1.0	4	.01	1.4	54	.20	1.6	---	.15
5	1.1	10	.03	1.4	27	.10	1.6	---	.15
6	1.2	9	.03	1.5	25	.10	1.6	42	.18
7	1.2	4	.01	1.4	14	.05	1.6	75	.32
8	1.1	12	.04	1.4	18	.07	1.5	140	.57
9	1.1	11	.03	1.3	---	.07	1.5	29	.12
10	1.1	14	.04	1.2	---	.06	1.5	19	.08
11	1.1	12	.04	1.3	---	.07	1.5	26	.11
12	1.2	3	.01	1.3	---	.07	1.5	17	.07
13	1.1	8	.02	1.3	---	.07	1.6	116	.50
14	1.1	5	.01	1.4	---	.09	1.6	114	.49
15	1.1	25	.07	1.4	---	.09	1.6	220	.95
16	1.1	8	.02	1.3	24	.08	1.6	232	1.0
17	1.2	6	.02	1.3	30	.11	1.6	250	1.1
18	1.2	7	.02	1.4	25	.09	1.6	170	.73
19	1.2	---	.03	1.4	7	.03	1.6	152	.66
20	1.2	---	.03	1.4	30	.11	1.6	275	1.2
21	1.3	10	.04	1.5	28	.11	1.6	---	1.0
22	1.3	---	.04	1.5	72	.29	1.6	---	.95
23	1.3	47	.16	1.5	71	.29	1.5	---	.80
24	1.3	10	.04	1.5	124	.50	1.5	---	.80
25	1.3	15	.05	1.5	191	.77	1.4	---	.75
26	1.4	21	.08	1.5	136	.55	1.4	---	.75
27	1.3	5	.02	1.5	121	.49	1.4	---	.75
28	1.4	---	.06	1.6	27	.12	1.5	---	.80
29	1.4	26	.10	1.6	18	.08	1.5	---	.80
30	1.4	---	.11	1.6	17	.07	1.5	---	.80
31	1.4	---	.13	---	---	---	1.5	---	.80
TOTAL	37.1	---	1.37	42.3	---	5.22	47.9	---	17.73

09306022 STEWART GULCH ABOVE WEST FORK, NEAR RIO BLANCO, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JANUARY			FEBRUARY			MARCH	
1	1.5	---	.80	1.7	---	.45	1.4	90	.36
2	1.5	195	.79	1.7	71	.33	1.3	200	.70
3	1.5	---	.80	1.7	102	.47	1.2	155	.50
4	1.6	---	.90	1.7	59	.27	1.4	200	.76
5	1.7	---	1.0	1.7	116	.53	1.3	130	.46
6	1.7	---	.90	1.7	203	.93	1.2	75	.24
7	1.7	---	.85	1.7	148	.68	1.3	110	.38
8	1.7	---	.75	1.6	71	.31	1.3	135	.47
9	1.7	---	.65	1.6	35	.15	1.3	140	.49
10	1.7	---	.55	1.6	55	.24	1.2	125	.41
11	1.7	---	.45	1.6	41	.18	1.2	109	.35
12	1.6	88	.38	1.6	130	.56	1.3	84	.29
13	1.5	---	.30	1.6	107	.46	1.4	---	.70
14	1.5	---	.25	1.6	58	.25	1.5	---	.80
15	1.6	---	.30	1.6	93	.40	1.5	---	.75
16	1.6	---	.15	1.6	192	.83	1.5	164	.66
17	1.6	28	.12	1.5	65	.26	1.6	157	.68
18	1.6	46	.20	1.5	68	.28	1.5	132	.53
19	1.6	41	.18	1.5	45	.18	1.6	160	.69
20	1.6	88	.38	1.5	62	.25	1.4	160	.60
21	1.6	99	.43	1.5	84	.34	1.4	205	.77
22	1.6	60	.26	1.5	69	.28	1.5	205	.83
23	1.7	189	.87	1.5	---	.55	1.5	175	.71
24	1.7	121	.56	1.5	210	.85	1.5	195	.79
25	1.6	70	.30	1.5	241	.98	1.6	150	.65
26	1.6	---	.35	1.3	208	.73	1.5	108	.44
27	1.7	84	.39	1.4	140	.53	1.5	127	.51
28	1.7	106	.49	1.4	91	.34	1.5	162	.66
29	1.7	43	.20	---	---	---	1.6	212	.92
30	1.7	57	.26	---	---	---	1.6	229	.99
31	1.7	103	.47	---	---	---	1.6	190	.82
TOTAL	50.5	---	15.28	43.9	---	12.61	44.2	---	18.90

09306022 STEWART GULCH ABOVE WEST FORK, NEAR RIO BLANCO, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	1.6	133	.57	1.4	78	.29	1.2	60	.19
2	1.7	148	.68	1.4	72	.27	1.1	15	.04
3	1.7	140	.64	1.5	56	.23	1.2	6	.02
4	1.6	128	.55	1.4	92	.35	1.1	10	.03
5	1.6	106	.46	1.4	59	.22	1.1	26	.08
6	1.7	75	.34	1.4	26	.10	1.0	43	.12
7	1.6	70	.30	1.4	30	.11	1.0	27	.07
8	1.5	127	.51	1.4	35	.13	1.0	59	.16
9	1.5	---	.45	1.4	48	.18	1.1	22	.07
10	1.5	82	.33	1.3	76	.27	1.1	38	.11
11	1.4	89	.34	1.3	39	.14	1.1	62	.18
12	1.4	110	.42	1.2	57	.18	1.1	18	.05
13	1.4	69	.26	1.2	52	.17	1.1	64	.19
14	1.2	103	.33	1.2	21	.07	1.0	31	.08
15	1.3	92	.32	1.2	18	.06	1.0	63	.17
16	1.3	73	.26	1.2	22	.07	.93	23	.06
17	1.3	62	.22	1.2	34	.11	1.0	45	.12
18	1.3	42	.15	1.2	39	.13	1.0	20	.05
19	1.2	44	.14	1.3	17	.06	1.1	49	.15
20	1.1	49	.15	1.3	22	.08	1.3	74	.26
21	1.2	72	.23	1.4	31	.12	.93	34	.09
22	1.2	70	.23	1.4	16	.06	1.0	33	.09
23	1.2	70	.23	1.2	9	.03	1.0	54	.15
24	1.2	44	.14	1.3	8	.03	1.0	78	.21
25	1.3	51	.18	1.3	44	.15	1.3	28	.10
26	1.3	51	.18	1.3	24	.08	1.4	41	.15
27	1.3	76	.27	1.3	14	.05	1.5	53	.21
28	1.3	63	.22	1.3	11	.04	1.3	16	.06
29	1.4	33	.12	1.3	19	.07	1.2	17	.06
30	1.4	65	.25	1.3	22	.08	1.3	15	.05
31	---	---	---	1.2	22	.07	---	---	---
TOTAL	41.7	---	9.47	40.6	---	4.00	33.46	---	3.37

09306022 STEWART GULCH ABOVE WEST FORK, NEAR RIO BLANCO, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JULY			AUGUST			SEPTEMBER	
1	1.4	18	.07	.08	---	.00	1.0	20	.05
2	1.4	31	.12	.07	---	.00	1.0	25	.07
3	1.4	21	.08	.10	---	.00	1.0	25	.07
4	1.2	13	.04	.13	---	.00	1.0	21	.06
5	1.1	13	.04	.17	---	.01	.82	37	.08
6	1.3	44	.15	.20	---	.01	.82	17	.04
7	1.1	34	.10	.20	---	.01	.82	65	.14
8	1.0	61	.16	.69	---	.09	.87	155	.36
9	1.0	45	.12	.82	44	.10	.87	72	.17
10	1.0	65	.18	82	29	.06	.87	20	.05
11	.93	38	.10	.82	29	.06	.82	55	.12
12	.87	38	.09	.87	---	.06	.82	16	.04
13	.87	38	.09	1.0	---	.05	.76	61	.13
14	.76	49	.10	.93	---	.05	.76	43	.09
15	.76	46	.09	.93	---	.04	.72	30	.06
16	.66	55	.10	.93	11	.03	.72	92	.18
17	.62	90	.15	.93	---	.02	.82	103	.23
18	.57	60	.09	.93	---	.02	.82	46	.10
19	.57	44	.07	1.0	---	.04	.82	33	.07
20	.49	33	.04	1.0	---	.04	.87	36	.08
21	.49	36	.05	1.0	---	.04	.82	19	.04
22	.53	60	.09	1.0	---	.03	.82	15	.03
23	.57	43	.07	1.0	12	.03	.82	22	.05
24	.57	36	.06	.93	8	.02	.82	18	.04
25	.38	---	.03	1.0	7	.02	.82	24	.05
26	.07	36	.01	1.0	---	.02	.82	30	.07
27	.02	---	.00	1.0	---	.03	.82	57	.13
28	.01	---	.00	1.0	11	.03	.82	31	.07
29	.02	---	.00	1.0	16	.04	.82	33	.07
30	.02	---	.00	1.0	17	.05	.87	48	.11
31	.05	---	.00	1.0	15	.04	---	---	---
TOTAL	21.73	---	2.29	23.55	---	1.04	25.25	---	2.85
YEAR	452.19		94.13						

09306025 WEST FORK STEWART GULCH NEAR RIO BLANCO, CO

LOCATION.--Lat 39°47'01", long 108°11'21", in SW¼SE¼ sec.17, T.3 S., R.96 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 2.1 mi (3.4 km) upstream from mouth, and 13.5 mi (21.7 km) west of Rio Blanco.

DRAINAGE AREA.--14.2 mi² (36.8 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1974 to Sept. 30, 1976, March 21 to September 1978.

REVISED RECORDS.--WRD CO 75-2: 1974(M).

GAGE.--Water-stage recorder. Concrete control since Aug. 26, 1974. Altitude of gage is 6,668 ft (2,032 m), from topographic map. Prior to Aug. 26, 1974, at datum 1.50 ft (0.457 m) lower (corrected).

REMARKS.--Records excellent. Diversions above gage for irrigation of small hay meadows.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 0.27 ft³/s (0.008 m³/s) Feb. 10, 1976; maximum gage height, 1.54 ft (0.469 m) Feb. 10, 1976 (backwater from ice); no flow many days each year.

EXTREMES FOR CURRENT YEAR.--No flow during period Mar. 21 to Sept. 30.

09306026 WEST FORK STEWART GULCH AT MOUTH, NEAR RIO BLANCO, CO

LOCATION.--Lat 39°48'45", long 108°11'00", in SE¼SE¼ sec.5, T.3 S., R.96 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 300 ft (91 m) upstream from mouth and 13.8 mi (22.2 km) west of Rio Blanco.

DRAINAGE AREA.--15.7 mi² (40.7 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1974 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,443 ft (1,964 m), from topographic map.

REMARKS.--Records fair. Diversion above station for irrigation of small hay meadows.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 38 ft³/s (1.08 m³/s) Sept. 3, 1977, gage height, 1.66 ft (0.506 m); no flow most days each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1.1 ft³/s (0.031 m³/s) at 0500 Mar. 20, gage height, 1.15 ft (0.351 m); no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.02	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.04	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.72	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.17	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.12	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.06	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.03	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.09	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.28	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.39	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.15	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.25	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.04	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	.00	.00	.00	.00	.29	2.09	.00	.00	.00	.00	.00	.00
MEAN	.000	.000	.000	.000	.010	.067	.000	.000	.000	.000	.000	.000
MAX	.00	.00	.00	.00	.25	.72	.00	.00	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	.6	4.1	.00	.00	.00	.00	.00	.00

CAL YR 1977 TOTAL 0.50 MEAN .001 MAX .50 MIN .00 AC-FT 1.0
WTR YR 1978 TOTAL 2.38 MEAN .007 MAX .72 MIN .00 AC-FT 4.7

NOTE.--NO GAGE-HEIGHT RECORD NOV. 20 TO JAN. 6.

09306028 WEST FORK STEWART GULCH AT MOUTH, NEAR RIO BLANCO, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1974 to current year.
WATER TEMPERATURE: April 1974 to current year.
SUSPENDED-SEDIMENT DISCHARGE: April 1974 to current year.

INSTRUMENTATION.--Water-quality monitor since April 1974. Automatic pumping sediment sampler since April 1974.

REMARKS.--Flow occurred only on days shown.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SEDIMENT CONCENTRATIONS: Maximum daily, 1,800 mg/L Sept. 3, 1977; no flow many days each year.
SEDIMENT LOADS: Maximum daily, 4.2 tons (3.8 t) Mar. 5, 1975; no flow many days each year.

EXTREMES FOR CURRENT YEAR.--
SEDIMENT CONCENTRATIONS: Maximum daily, 1,400 mg/L, estimated Mar. 7; no flow many days during year.
SEDIMENT LOADS: Maximum daily, 2.7 tons (2.4 t) estimated Mar. 7; no flow many days during year.

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JANUARY			FEBRUARY			MARCH	
1	.00			.00		---	.00		.00
2	.00			.00		---	.00		.00
3	.00			.00		---	.02		.01
4	.00			.00		---	.00		.00
5	.00			.00		---	.00		.00
6	.00			.00		---	.04		.02
7	.00			.00		---	.72		2.7
8	.00			.00		---	.17		.19
9	.00			.00		---	.12		.11
10	.00			.00		---	.06		.04
11	.00			.00		---	.00		.00
12	.00			.00		---	.00		.00
13	.00			.00		---	.00		.00
14	.00			.00		---	.00		.00
15	.00			.00		---	.00		.00
16	.00			.00		---	.00		.00
17	.00			.00		---	.03		.02
18	.00			.00		---	.09		.07
19	.00			.00		---	.28		.42
20	.00			.00		---	.39		.82
21	.00			.00		---	.15		.15
22	.00			.00		---	.01		.01
23	.00			.00		---	.01		.01
24	.00			.00		---	.00		.00
25	.00			.00		---	.00		.00
26	.00			.00		---	.00		.00
27	.00			.25		.15	.00		.00
28	.00			.04		.01	.00		.00
29	.00			---			.00		.00
30	.00			---			.00		.00
31	.00			---			.00		.00
TOTAL	0.00			0.29		0.16	2.09		4.57
YEAR	2.38		4.73						

09306033 SORGHUM GULCH NEAR RIO BLANCO, CO

LOCATION.--Lat 39°47'07", long 108°12'33", in SE¼SW¼ sec.18, T.3 S., R.96 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 3.3 mi (5.3 km) upstream from mouth and 14.6 mi (23.5 km) west of Rio Blanco.

DRAINAGE AREA.--1.22 mi^2 (3.16 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1974 to September 1976, March 21, to September 1978.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,843 ft (2,085.7 m), from topographic map.

REMARKS.--Records excellent except for days of flow which are good..

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7.0 ft^3/s (0.20 m^3/s) July 9, 1975, gage height, 1.71 ft (0.251 m); no flow most days each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1.9 ft^3/s (0.054 m^3/s) Aug. 1, gage height, 1.36 ft (0.415); no flow most days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						---	.00	.00	.00	.00	.70	.00
2						---	.00	.00	.00	.00	1.0	.00
3						---	.00	.00	.00	.00	.00	.00
4						---	.00	.00	.00	.00	.00	.00
5						---	.00	.00	.00	.00	.00	.00
6						---	.00	.00	.00	.00	.00	.00
7						---	.00	.00	.00	.00	.00	.00
8						---	.00	.00	.00	.00	.00	.00
9						---	.00	.00	.00	.00	.00	.00
10						---	.00	.00	.00	.00	.00	.00
11						---	.00	.00	.00	.00	.00	.00
12						---	.00	.00	.00	.00	.00	.00
13						---	.00	.00	.00	.00	.00	.00
14						---	.00	.00	.00	.00	.00	.00
15						---	.00	.00	.00	.00	.00	.00
16						---	.00	.00	.00	.00	.00	.00
17						---	.00	.00	.00	.00	.00	.00
18						---	.00	.00	.00	.00	.00	.00
19						---	.00	.00	.00	.00	.00	.00
20						---	.00	.00	.00	.00	.00	.00
21						.00	.00	.00	.00	.00	.00	.00
22						.00	.00	.00	.00	.00	.00	.00
23						.00	.00	.00	.00	.00	.00	.00
24						.00	.00	.00	.00	.00	.00	.00
25						.00	.00	.00	.00	.00	.00	.00
26						.00	.00	.00	.00	.00	.00	.00
27						.00	.00	.00	.00	.00	.00	.00
28						.00	.00	.00	.00	.00	.00	.00
29						.00	.00	.00	.00	.00	.00	.00
30						.00	.00	.00	.00	.00	.00	.00
31						.00	---	.00	---	.00	.00	---
TOTAL						---	.00	.00	.00	.00	1.70	.00
MEAN						---	.000	.000	.000	.000	.055	.000
MAX						---	.00	.00	.00	.00	1.0	.00
MIN						---	.00	.00	.00	.00	.00	.00
AC-FT						---	.00	.00	.00	.00	3.4	.00

09306036 SORGHUM GULCH AT MOUTH, NEAR RIO BLANCO, CO

LOCATION.--Lat 39°49'30", long 108°11'54", in NW¼NW¼ sec.5, T.3 S., R.96 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 1,400 ft (430 m) upstream from mouth and 14.8 mi (23.8 km) west of Rio Blanco.

DRAINAGE AREA.--3.62 mi² (9.38 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1974 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,372 ft (1,942.2 m), from topographic map.

REMARKS.--Records excellent except for those days of flow which are good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 59 ft³/s (1.67 m³/s) Sept. 3, 1977, gage height, 2.92 ft (0.890 m), from rating curve extended above 40 ft³/s (1.13 m³/s), from slope-area measurement; no flow most of each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6.5 ft³/s (0.18 m³/s) Aug. 1, gage height, 1.84 ft (0.561 m); no flow most days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.72	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.35	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	---
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	
TOTAL	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.07	.00
MEAN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.035	.000
MAX	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.72	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	2.1	.00

CAL YR 1977 TOTAL 10.24 MEAN .028 MAX 7.5 MIN .00 AC-FT 20
WTR YR 1978 TOTAL 1.07 MEAN .003 MAX .72 MIN .00 AC-FT 2.1

09306036 SORGHUM GULCH AT MOUTH, NEAR RIO BLANCO, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1974 to current year.
WATER TEMPERATURE: October 1974 to current year.
SUSPENDED-SEDIMENT DISCHARGE: October 1974 to current year.

INSTRUMENTATION.--Water-quality monitor since October 1974. Pumping sediment sampler since October 1974.

REMARKS.--Flow occurred only on days shown.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Not determined.
WATER TEMPERATURES: Not determined.
SEDIMENT CONCENTRATIONS: Maximum daily, 7,200 mg/L estimated Aug. 1; no flow many days during year.
SEDIMENT LOADS: Maximum daily, 14 tons (13 t) estimated Aug. 1; no flow many days during year.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1											186	
2											---	
3											---	
4											---	
5											---	
6											---	
7											---	
8											---	
9											---	
10											---	
11											---	
12											---	
13											---	
14											---	
15											---	
16											---	
17											---	
18											---	
19											---	
20											---	
21											---	
22											---	
23											---	
24											---	
25											---	
26											---	
27											---	
28											---	
29											---	
30											---	
31											---	

09306036 SORGHUM GULCH AT MOUTH, NEAR RIO BLANCO, CO--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1									21.0	16.0		
2									32.0	10.0		
3									---	---		
4									---	---		
5									---	---		
6									---	---		
7									---	---		
8									---	---		
9									---	---		
10									---	---		
11									---	---		
12									---	---		
13									---	---		
14									---	---		
15									---	---		
16									---	---		
17									---	---		
18									---	---		
19									---	---		
20									---	---		
21									---	---		
22									---	---		
23									---	---		
24									---	---		
25									---	---		
26									---	---		
27									---	---		
28									---	---		
29									---	---		
30									---	---		
31									---	---		

09306036 SORGHUM GULCH AT MOUTH, NEAR RIO BLANCO, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JULY			AUGUST			SEPTEMBER	
1	.00			.72		14	.00		
2	.00			.35		4.5	.00		
3	.00			.00		---	.00		
4	.00			.00		---	.00		
5	.00			.00		---	.00		
6	.00			.00		---	.00		
7	.00			.00		---	.00		
8	.00			.00		---	.00		
9	.00			.00		---	.00		
10	.00			.00		---	.00		
11	.00			.00		---	.00		
12	.00			.00		---	.00		
13	.00			.00		---	.00		
14	.00			.00		---	.00		
15	.00			.00		---	.00		
16	.00			.00		---	.00		
17	.00			.00		---	.00		
18	.00			.00		---	.00		
19	.00			.00		---	.00		
20	.00			.00		---	.00		
21	.00			.00		---	.00		
22	.00			.00		---	.00		
23	.00			.00		---	.00		
24	.00			.00		---	.00		
25	.00			.00		---	.00		
26	.00			.00		---	.00		
27	.00			.00		---	.00		
28	.00			.00		---	.00		
29	.00			.00		---	.00		
30	.00			.00		---	.00		
31	.00			.00		---	---		
TOTAL	0.00			1.07		18.5	0.00		
YEAR	1.07		18.5						

09306039 COTTONWOOD GULCH NEAR RIO BLANCO, CO

LOCATION.--Lat 39°49'36", long 108°12'25", in SW¼SE¼ sec.31, T.2 S., R.96 W., Rio Blanco County, Hydrologic Unit 14050006, on right bank 800 ft (240 m) upstream from mouth and 15.4 mi (24.8 km) west of Rio Blanco.

DRAINAGE AREA.--1.20 mi^2 (3.11 km^2).

PERIOD OF RECORD.--April 1974 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,353 ft (1,936 m), from topographic map.

REMARKS.--Records excellent. No diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 53 ft^3/s (1.50 m^3/s) Sept. 3, 1977, gage height, 2.94 ft (0.896 m); no flow most of each year.

EXTREMES FOR CURRENT YEAR.--No flow entire year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

CAL YR 1977 TOTAL 2.31 MEAN .006 MAX 1.2 MIN .00 AC-FT 4.6

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1974 to current year.
WATER TEMPERATURE: April 1974 to current year.
SUSPENDED-SEDIMENT DISCHARGE: April 1974 to current year.

INSTRUMENTATION.--Water-quality monitor since April 1974. Automatic pumping sediment sampler since April 1974.

REMARKS.--No flow during year. Daily maximum and minimum specific-conductance data available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 225 micromhos Mar. 24, 1976; minimum, 124 micromhos Mar. 27, 1976.
WATER TEMPERATURES: Maximum, 25.0°C Mar. 27, 1976; minimum, 4.5°C Mar. 24, 1976.
SEDIMENT CONCENTRATIONS: Maximum daily, 62,000 mg/L, estimated Sept. 3, 1977; no flow many days each year.
SEDIMENT LOADS: Maximum daily, 200 tons, estimated (181 t) Sept. 3, 1977; no flow many days each year.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Not determined.
WATER TEMPERATURES: Not determined.
SEDIMENT CONCENTRATIONS: Not determined.
SEDIMENT LOADS: Not determined.

09306042 PICEANCE CREEK TRIBUTARY NEAR RIO BLANCO, CO

LOCATION.--Lat 39°50'01", long 108°13'12", in SE¼NE¼ sec.36, T.2 S., R.97 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 600 ft (180 m) upstream from mouth and 16.2 mi (26.1 km) west of Rio Blanco.

DRAINAGE AREA.--1.06 mi^2 (2.75 km^2).

PERIOD OF RECORD.--April 1974 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,335 ft (1,931 m), from topographic map.

REMARKS.--Records excellent.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 451 ft^3/s (12.8 m^3/s) Sept. 3, 1977, gage height, 2.57 ft (0.783 m); no flow most of each year.

EXTREMES FOR CURRENT YEAR.--No flow entire year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

CAL YR 1977 TOTAL 13.20 MEAN .036 MAX 12 MIN .00 AC-FT 26

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1974 to current year.
WATER TEMPERATURE: April 1974 to current year.
SUSPENDED-SEDIMENT DISCHARGE: April 1974 to current year.

INSTRUMENTATION.--Water-quality monitor since April 1974. Pumping sediment sampler since April 1974.

REMARKS.--No flow during year.

09306050 SCANDARD GULCH NEAR RIO BLANCO, CO

LOCATION.--Lat 39°47'38", long 108°13'40", in NE¼NW¼ sec.13, T.3 S., R.97 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 50 ft (15 m) downstream from Little Scandard Gulch and 15.8 mi (25.4 km) west of Rio Blanco.

DRAINAGE AREA.--6.67 mi² (17.28 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1974 to September 1976, March to September 1978.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,646 ft (2,025.7 m), from topographic map.

REMARKS.--Records excellent except for day of flow which is poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11 ft³/s (0.31 m³/s) July 29, 1978, gage height, 1.74 ft (0.530 m); no flow most of each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 11 ft³/s (0.31 m³/s) July 29, gage height, 1.74 ft (0.530 m); no flow most of year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

JULY 29 0.82

WTR YR 1978 TOTAL 0.82 MEAN .002 MAX .82 MIN .00 AC-FT 1.6

09306052 SCANDARD GULCH AT MOUTH, NEAR RIO BLANCO, CO

LOCATION.--Lat 39°48'51", long 108°14'35", in SW¼SE¼ sec.2, T.3 S., R.97 W., Rio Blanco County, Hydrologic Unit 14050006, on right bank 2,100 ft (640 m) upstream from mouth and 16.8 mi (27.0 km) west of Rio Blanco.

DRAINAGE AREA.--8.03 mi² (20.80 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1974 to September 1976, November 1977 to September 1978.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,434 ft (1,961.1 m), from topographic map.

REMARKS.--Records excellent except for day of flow which is good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6.0 ft³/s (0.17 m³/s) July 29, 1978, gage height, 1.18 ft (0.360 m); maximum gage height, 1.65 ft (0.503 m), Mar. 4, 1975 (backwater from ice); no flow most days of each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6.0 ft³/s (0.17 m³/s) July 29, gage height, 1.18 ft (0.360 m); no flow most of year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

JULY 29 0.38

WTR YR 1978 TOTAL 0.38 MEAN .001 MAX .38 MIN .00 AC-FT .8

09306052 SCANDARD GULCH AT MOUTH, NEAR RIO BLANCO, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1974 to current year.
WATER TEMPERATURE: April 1974 to current year.
SUSPENDED SEDIMENT DISCHARGE: April 1974 to current year.

INSTRUMENTATION.--Water-quality monitor since April 1974. Automatic pumping sediment sampler since April 1974.

REMARKS.--Flow occurred only on days shown.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 425 micromhos Mar. 18, 1976; minimum, 147 micromhos July 29, 1978.
WATER TEMPERATURES: Maximum, 22.0°C July 29, 1978; minimum, 0.5°C Feb. 11, 12, 1976.
SEDIMENT CONCENTRATIONS: Maximum daily, 49,000 mg/L July 29, 1978; no flow many days each year.
SEDIMENT LOADS: Maximum daily, 50 tons (45 t) estimated July 29, 1978.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 169 micromhos July 29; minimum, 147 micromhos July 29.
WATER TEMPERATURES: Maximum, 22°C July 29; minimum, 19°C July 29.
SEDIMENT CONCENTRATIONS: 49,000 mg/L estimated July 29.
SEDIMENT LOAD: 50 tons (45 t) estimated July 29.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

JULY 29 158

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

JULY 29 MAX 22.0 MIN 19.0

SUSPENDED-SEDIMENT DISCHARGE (TON/DAY), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JULY	
29	0.38	49,000	50
YEAR	0.38		50

09306058 WILLOW CREEK NEAR RIO BLANCO, CO

LOCATION.--Lat 39°50'14", long 108°14'37", in NW¼NE¼ sec.35, T.2 S., R.97 W., Rio Blanco County, Hydrologic Unit 14050006, on right bank 1,500 ft (460 m) upstream from mouth and 17.4 mi (28.0 km) west of Rio Blanco.

DRAINAGE AREA.--48.7 mi² (126.1 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1974 to current year.

GAGE.--Water-stage recorder. Concrete control since Aug. 9, 1974. Altitude of gage is 6,273 ft (1,912 m), from topographic map.

REMARKS.--Records good except those for winter period, which are fair. Diversions above station for irrigation of about 315 acres (1.27 km²).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 23 ft³/s (0.65 m³/s) Sept. 3, 1977, gage height, 4.46 ft (1.359 m); no flow for many days in 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3.9 ft³/s (0.110 m³/s) at 1000 Mar. 4, gage height, 3.20 ft (0.975 m); maximum gage height, 3.75 ft (1.143 m), Dec. 23 (backwater from ice); no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	1.2	1.5	1.5	1.3	.00	1.2	1.1	.57	1.0	.47	.61
2	1.2	1.2	1.5	1.5	1.2	.00	1.2	1.0	.62	1.0	.42	.18
3	1.2	1.2	1.5	1.4	1.9	.05	1.2	1.5	.59	.90	.30	.27
4	1.2	1.2	1.5	1.4	2.0	1.6	1.1	1.3	.59	.82	.30	.27
5	1.2	1.2	1.5	1.5	2.1	1.8	1.1	1.4	.84	.90	.28	.31
6	1.3	1.3	1.5	1.5	1.9	1.8	1.2	.97	.85	.72	.28	.33
7	1.3	1.3	1.5	1.2	1.8	1.9	1.2	1.2	.87	.93	.26	.35
8	1.2	1.3	1.5	1.0	1.7	1.9	1.7	1.3	.99	.75	.26	.39
9	1.2	1.3	1.5	.91	2.0	2.0	1.8	.57	.92	.70	.24	.40
10	1.2	1.3	1.5	.65	1.8	.47	1.8	.00	.87	.78	.24	.44
11	1.2	1.3	1.5	.65	1.7	.00	1.7	.00	.83	.78	.34	.47
12	1.3	1.3	1.5	.76	1.4	.00	1.7	.00	.70	.48	.35	.51
13	1.3	1.3	1.7	.87	1.9	.00	1.6	.00	.52	.47	.34	.57
14	1.3	1.3	1.4	.92	1.7	.00	1.5	.00	.46	.50	.40	.57
15	1.2	1.3	1.3	1.3	1.8	.44	1.4	.00	.50	.47	.34	.54
16	1.2	1.3	1.3	1.2	1.7	.97	1.3	.00	.57	.50	.42	.51
17	1.2	1.3	1.3	.71	2.2	.57	1.4	.00	.57	.57	.37	.52
18	1.3	1.4	1.3	.55	2.4	1.7	1.4	.00	.62	.57	.27	.65
19	1.3	1.4	1.3	.85	2.1	1.8	1.6	.00	.64	.57	.36	.71
20	1.3	1.4	1.3	1.1	1.8	1.9	1.5	.00	.63	.55	.44	.83
21	1.2	1.5	1.4	.92	1.7	1.9	1.6	.00	.60	.50	.42	.77
22	1.2	1.5	1.4	1.1	2.1	1.9	1.5	.00	.59	.52	.42	.66
23	1.2	1.2	1.4	.99	2.1	1.8	1.4	.00	.58	.42	.40	.68
24	1.2	1.2	1.4	1.2	1.0	1.8	.81	.00	.56	.44	.39	.65
25	1.2	1.2	1.4	1.4	.09	1.7	.39	.00	.62	.50	.41	.60
26	1.1	1.4	1.4	1.6	.11	1.7	.81	.00	.68	.55	.36	.59
27	1.1	1.4	1.4	1.6	.00	1.7	1.3	.00	.73	.44	.36	.60
28	1.2	1.5	1.4	1.6	.00	1.1	1.2	.00	.78	.66	.44	.59
29	1.2	1.4	1.5	1.5	---	1.1	1.1	.31	.96	1.1	.65	.59
30	1.2	1.4	1.6	1.4	---	1.1	1.1	.50	.90	.47	.64	.65
31	1.2	---	1.6	1.4	---	1.1	---	.76	---	.44	.64	---
TOTAL	37.8	39.5	44.8	36.18	43.50	35.80	39.81	11.91	20.75	20.00	11.81	15.81
MEAN	1.22	1.32	1.45	1.17	1.55	1.15	1.33	.38	.69	.65	.38	.53
MAX	1.3	1.5	1.7	1.6	2.4	2.0	1.8	1.5	.99	1.1	.55	.83
MIN	1.1	1.2	1.3	.55	.00	.00	.39	.00	.46	.42	.24	.18
AC-FT	75	78	89	72	86	71	79	24	41	40	23	31

CAL YR 1977' TOTAL 408.91 MEAN 1.12 MAX 3.5 MIN .02 AC-FT 811
WTR YR 1978 TOTAL 357.67 MEAN .98 MAX 2.4 MIN .00 AC-FT 709

09306058 WILLOW CREEK NEAR RIO BLANCO, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: November 1974 to current year.
pH: March 1976 to current year.
DISSOLVED OXYGEN: March 1976 to current year.
WATER TEMPERATURE: November 1974 to current year.
SUSPENDED-SEDIMENT DISCHARGE: October 1974 to current year.

INSTRUMENTATION.--Water-quality monitor since November 1974. Pumping sediment sampler since October 1974.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,920 micromhos July 14, 1976; minimum, 528 micromhos Mar. 18, 1976.
WATER TEMPERATURES: Maximum, 30.0°C July 17, 1976; minimum, 0.0°C many days during winter months each year.
DISSOLVED OXYGEN: Maximum, 11.9 mg/L Mar. 12, 1976; minimum, 3.6 mg/L Sept. 29, 1978.
pH: Maximum, 8.7 units Aug. 10, 1977; minimum, 7.6 units Dec. 6, 1976, Jan. 2, 1977.
SEDIMENT CONCENTRATIONS: Maximum daily, 3,820 mg/L Sept. 3, 1977; minimum daily, no flow many days during 1978.
SEDIMENT LOADS: Maximum daily, 60 tons (54 t) Sept. 3, 1977; minimum daily, no flow many days during 1978.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 1,680 micromhos Mar. 18; minimum, not determined.
WATER TEMPERATURES: Maximum 28.5°C July 2; minimum, 0.0°C many days during November to March.
pH: Maximum, 8.6 units June 30, July 9; minimum, 7.7 units Feb. 20, Mar. 1, 2, Apr. 6, 7.
DISSOLVED OXYGEN: Maximum, 11.8 mg/L Aug. 19; minimum, 3.6 mg/L Sept. 29.
SEDIMENT CONCENTRATIONS: Maximum daily, 998 mg/L Mar. 16; minimum daily, no flow many days during year.
SEDIMENT LOADS: Maximum daily, 4.4 tons (4.0 t) Mar. 18; minimum daily, no flow many days during year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	OXYGEN, DISSOLVED (MG/L)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)
OCT 21...	0930	1.0	1240	8.4	7.0	5	10.1	540	140	90	76	120
NOV 15...	1245	1.1	1240	8.4	6.1	3	9.9	530	140	87	76	110
DEC 07...	1300	1.3	1200	8.4	2.5	4	10.5	550	150	92	76	110
JAN 17...	1000	.72	1200	8.3	3.0	5	9.8	560	160	95	78	110
FEB 21...	1400	2.1	1050	8.4	6.0	4	10.8	520	120	92	70	110
MAR 29...	0930	1.5	1200	8.1	7.0	5	9.8	610	200	110	80	120
APR 18...	0830	1.5	1225	8.3	1.5	3	9.6	570	160	99	78	120
JUN 14...	0945	.52	1350	8.0	12.0	4	7.4	570	140	93	81	130
JUL 25...	1230	.55	1300	8.3	21.5	6	7.4	540	170	89	77	130
AUG 16...	0900	.72	1300	8.1	7.5	5	9.4	550	130	90	78	130
SEP 12...	0930	.69	1200	8.2	5.5	0	9.8	540	130	90	76	130

09306058 WILLOW CREEK NEAR RIO BLANCO, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)
OCT 21...	2.3	1.5	480	1	400	340	9.8	.4	15	891	1.21	2.41
NOV 15...	2.1	1.6	480	0	390	320	9.8	.4	15	857	1.17	2.55
DEC 07...	2.1	1.4	480	1	400	330	9.7	.4	16	878	1.19	3.08
JAN 17...	2.0	1.5	490	0	400	330	9.9	.6	16	885	1.20	1.72
FEB 21...	2.1	1.9	480	0	390	320	9.5	.4	16	858	1.17	4.86
MAR 29...	2.1	1.5	500	0	410	330	18	.4	14	926	1.26	3.75
APR 18...	2.2	1.8	500	0	420	350	10	.4	14	921	1.25	3.73
JUN 14...	2.4	2.2	520	0	430	350	11	.4	15	944	1.28	1.33
JUL 25...	2.4	2.2	450	0	370	330	11	.4	17	879	1.20	1.31
AUG 16...	2.4	2.3	510	0	420	350	13	.4	16	931	1.27	1.81
SEP 12...	2.4	1.8	500	0	410	350	15	.5	17	932	1.27	1.74

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	ARSENIC DIS-SOLVED (UG/L AS AS)	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)
OCT 21...	.00	.01	.03	.04	.00	.00	2	110	30	20	2.5	.5
NOV 15...	.17	.01	.11	.12	.04	.00	3	110	30	20	7.4	1.0
DEC 07...	.23	.01	.11	.12	.07	.02	2	110	30	20	2.5	.8
JAN 17...	.47	.01	.68	.69	.02	.00	1	100	20	30	2.0	.7
FEB 21...	.36	.07	.20	.27	.09	.01	2	100	190	10	3.7	2.0
MAR 29...	.41	.01	.27	.28	.07	.00	1	130	30	20	2.8	.7
APR 18...	.34	.03	.32	.35	.04	.02	1	110	30	20	4.1	1.7
JUN 14...	.14	.00	.33	.33	.00	.00	1	120	120	10	7.2	1.4
JUL 25...	.04	.01	.30	.31	.02	.01	3	120	90	0	6.8	.6
AUG 16...	.01	.02	.66	.68	.01	.00	1	120	20	0	9.3	--
SEP 12...	.20	.03	.21	.24	.01	.00	3	110	70	30	2.4	.1

09306058 WILLOW CREEK NEAR RIO BLANCO, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI FECAL, (COLS. PER 100 ML)	SULFIDE DIS-SOLVED (MG/L AS S)	BROMIDE DIS-SOLVED (MG/L AS BR)	SOLIDS, RESIDUE AT 105 DEG. C, DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	BARIUM, DIS-SOLVED (UG/L AS BA)
DEC 07...	1300	18	K16	K5	K20	.1	.1	880	100	30	600
MAR 29...	0930	8	400	K5	20	--	.1	960	133	20	200
JUN 14...	0945	15	44	35	--	--	.3	1000	<1	0	200
SEP 12...	0930	32	--	150	370	--	.1	--	--	20	200

DATE	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, DIS-SOLVED (UG/L AS CU)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	ZINC, DIS-SOLVED (UG/L AS ZN)	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT)
DEC 07...	1	0	1	1	10	.0	3	1	3000	20	<9.4
MAR 29...	0	0	0	0	10	.0	4	1	2800	20	<9.8
JUN 14...	3	5	3	5	10	.1	4	2	3200	20	<9.9
SEP 12...	1	0	4	5	0	.0	5	1	3400	30	<9.9

DATE	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DIS-SOLVED, RADON METHOD (PCI/L)	URANIUM NATURAL DIS-SOLVED (UG/L AS U)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	OIL AND GREASE (MG/L)
DEC 07...	6.6	<2.4	3.8	<2.1	3.4	.04	1.7	.00	1	--	0
MAR 29...	5.8	3.1	4.7	2.7	4.0	.06	2.5	.00	0	.00	0
JUN 14...	<.4	<2.8	<.4	<2.5	<.4	.13	2.5	.00	1	--	0
SEP 12...	<.4	<4.1	<.4	<3.8	<.4	.05	--	.00	0	.00	0

DATE	TIME	ALDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	CHLOR-DANE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDD, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDT, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DI-AZINON, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DI-ELDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ENDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ETHION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
MAR 29...	0930	.0	0	.0	.1	.0	.0	.0	.0	.0
SEP 12...	0930	.0	0	.0	.2	.0	.9	.0	.0	.0

DATE	HEPTA-CHLOR, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	HEPTA-CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	MALA-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	METHYL PARA-THION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRI-THION, TOT. IN BOTTOM MATL. (UG/KG)	PARA-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	TOXA-PHENE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	TRI-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	2,4-D, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
MAR 29...	.0	.0	.0	.0	.0	.0	.0	0	.0	0
SEP 12...	.0	.0	.0	.0	.0	.0	.0	0	.0	0

K BASED ON NON-IDEAL COLONY COUNT.

09306058 WILLOW CREEK NEAR RIO BLANCO, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	1270	1290	---	---	1330						1190
2	---	1270	1250	---	---	1280						---
3	---	1260	1250	---	---	1240						---
4	---	1260	1260	---	---	---						---
5	---	1250	1270	---	---	---						---
6	---	1230	1290	---	---	---						1290
7	---	1250	1280	---	---	---						1280
8	---	1270	1280	---	---	---						1290
9	---	1280	1260	---	---	---						1290
10	---	1270	1270	---	1260	---						1300
11	---	1270	1270	---	1240	---						1300
12	---	---	1270	---	1180	---						1300
13	---	1260	1290	---	1280	---						1310
14	---	1240	1270	---	1300	---						1310
15	---	1250	1260	---	1250	1270						1290
16	---	1270	1250	---	1300	1290						1330
17	---	1270	---	1320	1250	1340						1380
18	---	1260	---	1300	1280	1360						1380
19	---	1240	---	---	1290	---						1380
20	---	1280	---	---	1370	1430						1370
21	---	---	---	---	1280	---						1370
22	---	---	---	---	1220	---						1360
23	---	---	---	---	1230	---						1360
24	---	---	---	---	1230	---						1360
25	1240	---	---	---	1270	---						1360
26	1250	---	---	---	1270	---						1360
27	1250	---	---	1230	1270	---						1350
28	1250	---	---	---	1270	---						1360
29	1240	1280	---	---	---	---						1370
30	1250	1280	---	1350	---	---						1330
31	1260	---	---	1320	---	---						---

09306058 WILLOW CREEK NEAR RIO BLANCO, CO--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	6.0	.0	6.5	.5	---	---	---	---	7.0	6.0
2	---	---	8.0	.0	5.5	1.0	---	---	---	---	7.5	5.0
3	---	---	8.5	1.0	5.5	3.0	---	---	---	---	9.5	.0
4	---	---	9.5	2.0	5.5	2.5	---	---	---	---	---	---
5	---	---	10.0	3.0	4.5	.0	4.0	1.5	---	---	---	---
6	---	---	8.0	5.0	2.5	.0	3.5	1.5	---	---	---	---
7	---	---	9.0	5.0	4.5	.0	3.0	.0	---	---	---	---
8	---	---	5.0	.0	3.5	.0	2.0	.0	---	---	---	---
9	---	---	2.0	.0	2.5	.0	4.5	1.5	---	---	---	---
10	---	---	4.0	.0	6.0	.5	5.0	3.5	6.5	3.0	---	---
11	---	---	5.0	.0	5.5	.0	5.5	3.5	5.5	1.5	---	---
12	---	---	7.5	1.0	4.5	.5	4.0	1.0	2.5	.0	---	---
13	---	---	6.0	.0	3.5	.0	4.5	.0	7.0	[illegible]	---	---
14	---	---	6.0	3.0	6.0	1.0	6.0	.0	7.0	3.0	---	---
15	---	---	7.0	2.5	6.5	2.0	7.0	4.0	5.0	.5	8.5	.5
16	---	---	7.0	.0	---	---	8.0	1.5	6.5	2.5	9.5	.5
17	---	---	6.0	.0	---	---	6.5	4.0	4.0	.0	13.5	1.5
18	---	---	7.0	3.5	---	---	6.0	3.0	7.5	.0	13.5	2.5
19	---	---	3.5	.0	---	---	---	---	7.0	1.0	---	---
20	---	---	---	---	---	---	---	---	8.0	4.5	13.0	5.0
21	---	---	---	---	---	---	---	---	8.5	.5	---	---
22	---	---	---	---	---	---	---	---	7.5	.0	---	---
23	---	---	---	---	---	---	---	---	8.5	.0	---	---
24	---	---	---	---	---	---	---	---	8.0	.0	---	---
25	11.5	5.5	---	---	---	---	---	---	7.5	3.0	---	---
26	11.0	2.5	---	---	---	---	---	---	8.0	4.5	---	---
27	11.0	4.5	---	---	---	---	5.5	2.0	7.5	4.5	---	---
28	11.0	4.5	---	---	---	---	---	---	8.0	3.0	---	---
29	9.5	5.0	6.0	.0	---	---	---	---	---	---	18.0	6.5
30	8.5	5.0	8.0	.0	---	---	7.5	3.0	---	---	---	---
31	5.0	4.5	---	---	---	---	6.0	2.0	---	---	---	---

09306058 WILLOW CREEK NEAR RIO BLANCO, CO--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---			---	---	26.0	8.0	22.0	9.5	17.5	8.0
2	14.0	5.0			---	---	28.5	9.0	26.5	8.0	---	---
3	11.5	4.0			---	---	24.0	7.0	27.0	8.5	---	---
4	15.0	3.5			---	---	---	---	26.0	7.0	---	---
5	13.0	5.0			---	---	---	---	26.5	6.0	---	---
6	15.5	4.5			---	---	25.5	8.5	25.5	7.0	23.0	8.0
7	17.0	4.0			---	---	28.0	9.5	27.0	8.0	21.5	8.5
8	---	---			---	---	27.0	9.0	25.5	7.0	19.5	7.5
9	---	---			---	---	24.0	7.0	26.5	8.5	20.5	6.0
10	---	---			---	---	23.5	9.0	22.5	9.5	18.5	7.0
11	---	---			---	---	---	---	19.0	8.5	15.5	8.0
12	---	---			---	---	27.0	8.5	24.0	10.0	15.5	6.0
13	14.5	4.5			---	---	27.0	6.0	19.0	10.5	17.0	3.5
14	16.5	5.0			23.0	9.0	---	---	14.5	8.5	13.5	3.5
15	15.5	5.5			24.0	5.5	---	---	22.0	4.5	18.0	6.5
16	15.5	3.0			24.0	5.5	---	---	21.5	9.0	15.5	5.5
17	9.0	2.5			24.5	5.0	---	---	22.0	6.0	10.5	4.5
18	16.0	.5			25.0	5.5	---	---	19.5	6.0	12.0	5.0
19	15.5	1.0			---	---	22.5	10.5	22.0	4.0	15.5	2.0
20	---	---			---	---	---	---	20.5	6.5	17.0	3.5
21	---	---			---	---	23.0	7.0	20.0	8.5	17.5	4.0
22	---	---			---	---	25.5	7.0	19.0	11.5	15.0	5.0
23	---	---			---	---	27.5	7.0	23.0	9.0	17.5	5.0
24	---	---			---	---	---	---	21.5	7.0	18.0	4.5
25	---	---			---	---	27.0	8.0	20.5	8.0	17.5	4.5
26	---	---			23.5	5.5	27.5	8.5	21.5	7.0	17.5	5.0
27	---	---			20.5	6.5	28.0	7.5	21.0	5.0	17.5	5.0
28	---	---			20.5	9.0	22.5	10.5	20.0	5.0	17.0	3.5
29	---	---			16.5	8.5	21.5	11.5	20.0	6.5	16.0	4.0
30	---	---			20.5	8.5	27.0	9.5	17.5	6.0	14.5	4.0
31	---	---			---	---	21.0	8.0	18.5	8.5	---	---

09306058 WILLOW CREEK NEAR RIO BLANCO, CO--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	1.2	---	.09	1.2	68	.22	1.5	38	.15
2	1.2	---	.06	1.2	44	.14	1.5	105	.42
3	1.2	28	.09	1.2	33	.11	1.5	95	.38
4	1.2	64	.21	1.2	38	.12	1.5	90	.37
5	1.2	47	.15	1.2	53	.17	1.5	105	.42
6	1.3	57	.20	1.3	52	.18	1.5	142	.58
7	1.3	57	.20	1.3	---	.18	1.5	124	.50
8	1.2	60	.19	1.3	50	.18	1.5	95	.38
9	1.2	65	.21	1.3	---	.20	1.5	62	.25
10	1.2	66	.21	1.3	---	.20	1.5	114	.46
11	1.2	---	.20	1.3	---	.20	1.5	67	.27
12	1.3	---	.20	1.3	---	.20	1.5	65	.26
13	1.3	---	.20	1.3	---	.20	1.7	72	.33
14	1.3	---	.20	1.3	---	.20	1.4	---	.20
15	1.2	---	.15	1.3	67	.24	1.3	---	.20
16	1.2	---	.15	1.3	---	.20	1.3	---	.20
17	1.2	---	.10	1.3	---	.20	1.3	---	.20
18	1.3	---	.10	1.4	---	.25	1.3	---	.20
19	1.3	---	.10	1.4	---	.25	1.3	---	.20
20	1.3	---	.10	1.4	---	.25	1.3	---	.20
21	1.2	20	.06	1.5	---	.30	1.4	---	.20
22	1.2	16	.05	1.5	90	.36	1.4	---	.20
23	1.2	20	.06	1.2	110	.36	1.4	---	.20
24	1.2	22	.07	1.2	---	.20	1.4	---	.20
25	1.2	25	.08	1.2	47	.15	1.4	---	.20
26	1.1	33	.10	1.4	165	.62	1.4	---	.20
27	1.1	44	.14	1.4	200	.76	1.4	---	.20
28	1.2	33	.11	1.5	88	.36	1.4	---	.20
29	1.2	28	.09	1.4	57	.22	1.5	---	.25
30	1.2	26	.08	1.4	90	.34	1.6	---	.30
31	1.2	30	.10	---	---	---	1.6	---	.30
TOTAL	37.8	---	4.05	39.5	---	7.56	44.8	---	8.62

09306058 WILLOW CREEK NEAR RIO BLANCO, CO--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JANUARY			FEBRUARY			MARCH	
1	1.5	---	.30	1.3	124	.44	.00	0	.00
2	1.5	---	.30	1.2	100	.32	.00	0	.00
3	1.4	---	.30	1.9	337	1.7	.05	---	.00
4	1.4	---	.30	2.0	513	2.8	1.6	712	3.1
5	1.5	81	.33	2.1	551	3.1	1.8	285	1.4
6	1.5	76	.31	1.9	390	2.0	1.8	214	1.0
7	1.2	57	.18	1.8	154	.75	1.9	---	1.3
8	1.0	65	.17	1.7	135	.62	1.9	294	1.5
9	.91	43	.11	2.0	171	.92	2.0	238	1.3
10	.65	66	.12	1.8	---	.70	.47	---	.04
11	.65	104	.18	1.7	138	.63	.00	0	.00
12	.76	247	.51	1.4	114	.43	.00	0	.00
13	.87	228	.54	1.9	65	.33	.00	0	.00
14	.92	180	.45	1.7	81	.37	.00	0	.00
15	1.3	180	.63	1.8	100	.48	.44	---	.15
16	1.2	162	.52	1.7	104	.48	.97	998	2.6
17	.71	142	.27	2.2	154	.91	.57	950	1.5
18	.55	47	.07	2.4	242	1.6	1.7	960	4.4
19	.85	171	.39	2.1	293	1.7	1.8	167	.78
20	1.1	100	.30	1.8	347	1.7	1.9	233	1.2
21	.92	85	.21	1.7	361	1.7	1.9	276	1.4
22	1.1	104	.31	2.1	409	2.3	1.9	237	1.2
23	.99	81	.22	2.1	247	1.4	1.8	242	1.2
24	1.2	86	.28	1.0	76	.21	1.8	247	1.2
25	1.4	61	.23	.09	---	.01	1.7	152	.70
26	1.6	48	.21	.11	---	.01	1.7	190	.87
27	1.6	57	.25	.00	0	.00	1.7	---	.90
28	1.6	124	.53	.00	0	.00	1.1	207	.62
29	1.5	48	.19	---	---	---	1.1	142	.42
30	1.4	106	.40	---	---	---	1.1	142	.42
31	1.4	125	.47	---	---	---	1.1	170	.51
TOTAL	36.18	---	9.58	43.50	---	27.61	35.80	---	29.71

09306058 WILLOW CREEK NEAR RIO BLANCO, CO--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	1.2	171	.55	1.1	49	.15	.57	356	.55
2	1.2	133	.43	1.0	52	.14	.62	89	.15
3	1.2	157	.51	1.5	55	.22	.59	33	.05
4	1.1	290	.86	1.3	90	.32	.59	43	.07
5	1.1	176	.52	1.4	147	.56	.84	62	.14
6	1.2	214	.69	.97	---	.35	.85	190	.44
7	1.2	133	.43	1.2	---	.50	.87	125	.29
8	1.7	162	.74	1.3	166	.58	.99	133	.36
9	1.8	135	.66	.57	---	.10	.92	176	.44
10	1.8	160	.78	.00	---	.00	.87	116	.27
11	1.7	157	.72	.00	---	.00	.83	185	.42
12	1.7	169	.78	.00	---	.00	.70	104	.20
13	1.6	176	.76	.00	---	.00	.52	138	.19
14	1.5	147	.60	.00	---	.00	.46	152	.19
15	1.4	399	1.5	.00	---	.00	.50	33	.04
16	1.3	266	.93	.00	---	.00	.57	33	.05
17	1.4	180	.68	.00	---	.00	.57	38	.06
18	1.4	201	.76	.00	---	.00	.62	43	.07
19	1.6	109	.47	.00	---	.00	.64	33	.06
20	1.5	100	.40	.00	---	.00	.63	38	.06
21	1.6	176	.76	.00	---	.00	.60	67	.11
22	1.5	109	.44	.00	---	.00	.59	57	.09
23	1.4	195	.74	.00	---	.00	.58	84	.13
24	.81	62	.14	.00	---	.00	.56	52	.08
25	.39	48	.05	.00	---	.00	.62	33	.06
26	.81	71	.16	.00	---	.00	.68	48	.09
27	1.3	62	.22	.00	---	.00	.73	46	.09
28	1.2	87	.28	.00	---	.00	.78	90	.19
29	1.1	93	.28	.31	---	.02	.96	230	.60
30	1.1	62	.18	.50	---	.20	.90	166	.40
31	---	---	---	.76	166	.34	---	---	---
TOTAL	39.81	---	17.02	11.91	---	3.48	20.75	---	5.94

09306058 WILLOW CREEK NEAR RIO BLANCO, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JULY			AUGUST			SEPTEMBER	
1	1.0	204	.55	.47	62	.08	.61	24	.04
2	1.0	166	.45	.42	24	.03	.18	20	.01
3	.90	261	.63	.30	24	.02	.27	38	.03
4	.82	294	.65	.30	24	.02	.27	43	.03
5	.90	204	.50	.28	19	.01	.31	19	.02
6	.72	124	.24	.28	14	.01	.33	---	.02
7	.93	223	.56	.26	19	.01	.35	---	.03
8	.75	214	.43	.26	14	.01	.39	41	.04
9	.70	95	.18	.24	26	.02	.40	33	.04
10	.78	100	.21	.24	10	.01	.44	14	.02
11	.78	81	.17	.34	14	.01	.47	17	.02
12	.48	33	.04	.35	15	.01	.51	20	.03
13	.47	38	.05	.34	24	.02	.57	32	.05
14	.50	---	.05	.40	10	.01	.57	47	.07
15	.47	38	.05	.34	6	.01	.54	44	.06
16	.50	52	.07	.42	10	.01	.51	41	.06
17	.57	57	.09	.37	27	.03	.52	33	.05
18	.57	52	.08	.27	37	.03	.65	17	.03
19	.57	62	.10	.36	28	.03	.71	25	.05
20	.55	81	.12	.44	---	.03	.83	29	.07
21	.50	114	.15	.42	25	.03	.77	29	.06
22	.52	119	.17	.42	32	.04	.66	25	.04
23	.42	100	.11	.40	31	.03	.68	30	.06
24	.44	52	.06	.39	54	.06	.65	28	.05
25	.50	62	.08	.41	35	.04	.60	38	.06
26	.55	100	.15	.36	29	.03	.59	51	.08
27	.44	57	.07	.36	22	.02	.60	37	.06
28	.66	---	.10	.44	28	.03	.59	25	.04
29	1.1	76	.23	.65	20	.04	.59	24	.04
30	.47	33	.04	.64	22	.04	.65	---	.04
31	.44	95	.11	.64	25	.04	---	---	---
TOTAL	20.00	---	6.49	11.81	---	0.81	15.81	---	1.30
YEAR	357.67		122.17						

09306061 PICEANCE CREEK ABOVE HUNTER CREEK, NEAR RIO BLANCO, CO

LOCATION.--Lat 39°51'02", long 108°15'30", in SE¼NE¼ sec.27, T.2 S., R.97 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 20 ft (6 m) downstream from private bridge, 0.4 mi (0.6 km) upstream from Hunter Creek, and 18.7 mi (30.1 km) west of Rio Blanco.

DRAINAGE AREA.--309 mi² (800 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1974 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,214 ft (1,894 m), from topographic map.

REMARKS.--Records good except those for winter period, which are fair. Diversions above station for irrigation above and below station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 492 ft³/s (13.9 m³/s) Sept. 3, 1977, gage height, 4.19 ft (1.277 m); no flow Oct. 4, 5, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 3, 1977, exceeded all other floods at this location since at least 1939, from information by local resident.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 368 ft³/s (10.4 m³/s) at 1200 June 6, gage height, 3.75 ft (1.143 m); minimum daily, 2.6 ft³/s (0.074 m³/s) no flow Oct. 4, 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.1	5.7	8.9	10	10	9.3	56	24	15	14	7.4	2.6
2	2.8	5.6	11	9.6	12	10	53	24	19	13	8.7	2.5
3	.50	5.3	10	9.5	17	10	41	26	19	10	8.2	2.2
4	.00	5.0	10	9.7	12	14	32	34	20	6.6	9.0	2.3
5	.00	4.4	10	9.6	10	9.3	39	31	24	6.0	10	3.3
6	.59	4.3	10	9.4	9.4	10	31	27	60	5.5	10	4.0
7	1.1	4.0	10	10	9.5	11	33	26	18	4.8	9.8	4.5
8	1.2	3.8	11	10	8.7	11	30	26	6.8	2.4	9.6	4.9
9	1.6	2.9	14	9.8	7.7	12	29	25	5.7	1.1	7.4	4.9
10	2.1	2.9	12	10	7.6	12	30	22	4.5	1.3	11	5.4
11	2.1	3.3	12	11	7.8	11	28	20	3.7	1.9	10	5.8
12	2.0	3.2	12	11	8.0	11	27	20	8.5	3.4	5.6	7.0
13	.57	3.5	11	11	8.0	11	27	16	8.1	2.3	4.0	6.4
14	.04	3.7	12	11	8.4	12	27	14	4.1	1.0	6.0	6.7
15	.37	3.8	12	11	8.8	13	26	17	3.8	.21	5.9	6.5
16	1.8	3.6	12	11	9.0	17	25	18	1.0	.17	5.7	6.1
17	2.6	4.1	13	11	13	11	25	17	1.4	.15	5.7	6.1
18	3.8	4.9	13	11	19	12	25	18	1.5	11	4.8	6.5
19	4.0	4.2	12	10	18	14	25	17	1.5	12	3.0	4.5
20	4.3	9.4	12	9.9	9.6	16	23	15	1.0	13	2.8	4.9
21	6.4	12	13	9.5	9.4	16	23	18	2.4	8.6	3.1	5.6
22	6.3	7.9	13	9.2	12	16	21	22	5.0	12	4.1	5.8
23	5.7	7.6	9.8	9.4	11	17	18	19	4.8	12	4.5	6.0
24	6.2	11	8.4	12	10	18	16	17	5.0	12	5.1	5.5
25	5.5	11	7.6	25	9.0	17	12	19	3.6	11	6.8	7.0
26	6.6	7.6	7.8	9.6	9.6	17	13	17	5.7	9.5	3.4	9.8
27	4.9	7.3	8.2	9.5	9.9	16	14	16	9.5	8.1	2.9	10
28	5.1	7.2	8.0	15	9.5	17	9.0	17	9.0	7.9	3.0	7.6
29	5.3	7.4	8.7	9.9	---	25	12	19	13	8.0	3.0	5.2
30	5.6	8.4	9.1	9.6	---	32	18	15	15	8.0	3.3	4.8
31	5.9	---	9.2	10	---	43	---	12	---	6.9	3.4	---
TOTAL	98.07	175.0	330.7	334.2	293.9	470.6	788.0	628	299.6	213.83	187.2	164.4
MEAN	3.16	5.83	10.7	10.8	10.5	15.2	26.3	20.3	9.99	6.90	6.04	5.48
MAX	6.6	12	14	25	19	43	56	34	60	14	11	10
MIN	.00	2.9	7.6	9.2	7.6	9.3	9.0	12	1.0	.15	2.8	2.2
AC-FT	195	347	656	663	583	933	1560	1250	594	424	371	326

CAL YR 1977 TOTAL 3102.17 MEAN 8.50 MAX 115 MIN .00 AC-FT 6150
WTR YR 1978 TOTAL 3983.50 MEAN 10.9 MAX 60 MIN .00 AC-FT 7900

09306061 PICEANCE CREEK ABOVE HUNTER CREEK, NEAR RIO BLANCO, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1974 to current year.
WATER TEMPERATURE: October 1974 to current year.
SUSPENDED-SEDIMENT DISCHARGE: April 1974 to current year.

INSTRUMENTATION.--Automatic pumping sediment sampler since April 1974. Water-quality monitor since October 1974.

REMARKS.--Daily maximum and minimum specific-conductance data available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,980 micromhos Jan. 15, 1976; minimum, 550 micromhos Apr. 5, 1978.
WATER TEMPERATURES: Maximum, 26.5°C June 26, 1977; minimum, freezing point on many days during winter months.
DISSOLVED OXYGEN: Maximum, 16.5 mg/L Mar. 21, 22, 1976; minimum, 3.1 mg/L Sept. 10, 1978.
pH: Maximum, 8.9 units Dec. 7, 1977; minimum, 7.5 units Oct. 8, 9, 1975.
SEDIMENT CONCENTRATIONS: Maximum daily, 87,000 mg/L, estimated Sept. 3, 1977; minimum daily, no flow Oct. 4, 5, 1977.
SEDIMENT LOADS: Maximum daily, 27,000 tons, estimated (24,000 t) Sept. 3, 1977; minimum daily, no flow Oct. 4, 5, 1977.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 1,580 micromhos Oct. 8, 9, Nov. 20; minimum, 550 micromhos Apr. 5.
WATER TEMPERATURES: Maximum, 26.0°C July 14; minimum, freezing point on many days during November to March.
DISSOLVED OXYGEN: Maximum, 13.6 mg/L Oct. 22; minimum, 3.1 mg/L Sept. 10.
pH: Maximum, 8.9 units Dec. 7; minimum, 7.8 units Apr. 29, 30.
SEDIMENT CONCENTRATIONS: Maximum daily, 4,110 mg/L Apr. 1; minimum daily, no flow Oct. 4, 5.
SEDIMENT LOADS: Maximum daily, 858 tons (778 t) June 6; minimum daily, no flow Oct. 4, 5.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	OXYGEN, DISSOLVED (MG/L)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)
OCT 20...	1300	4.7	1410	8.3	10.5	8	12.9	550	62	85	83	170
NOV 15...	1015	4.3	1430	8.1	5.4	8	10.0	580	37	85	89	160
DEC 07...	1030	12	1250	8.3	2.0	5	10.0	520	70	87	73	150
JAN 16...	1200	10	1200	8.1	2.0	6	10.2	480	22	84	66	130
FEB 21...	1100	7.9	1250	8.2	2.5	4	10.6	520	43	84	75	140
MAR 29...	1100	31	1000	7.8	7.0	25	9.4	400	40	74	52	130
APR 17...	1000	26	875	8.2	4.5	10	10.0	380	31	73	47	91
MAY 18...	1040	8.3	1150	8.5	7.5	11	9.2	420	0	71	58	130
JUN 13...	1015	9.2	1500	8.3	13.0	7	8.1	430	0	42	78	190
JUL 25...	1100	12	1300	8.2	14.0	5	8.4	460	0	76	65	160
AUG 15...	1100	6.4	1450	8.3	14.5	6	10.2	460	0	74	67	160
SEP 11...	1030	5.4	1425	8.3	13.5	5	9.4	480	0	77	70	160

09306061 PICEANCE CREEK ABOVE HUNTER CREEK, NEAR RIO BLANCO, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)
OCT												
20...	3.1	2.9	600	0	490	380	13	.7	17	1050	1.43	13.3
NOV												
15...	2.9	2.8	660	0	540	360	15	.7	17	1060	1.44	12.3
DEC												
07...	2.9	2.5	550	0	450	330	12	.7	17	950	1.29	30.8
JAN												
16...	2.6	2.4	560	0	460	300	14	.7	19	895	1.22	24.2
FEB												
21...	2.7	2.5	580	0	480	290	14	.7	16	911	1.24	19.4
MAR												
29...	2.8	3.3	440	0	360	260	27	.6	11	780	1.06	65.3
APR												
17...	2.0	2.8	420	0	340	200	9.6	.5	14	650	.88	45.6
MAY												
18...	2.8	4.4	550	1	450	220	12	.7	17	789	1.07	17.7
JUN												
13...	4.0	4.5	560	0	460	320	14	.8	18	948	1.29	23.5
JUL												
25...	3.3	3.3	560	0	460	260	21	.9	17	881	1.20	28.5
AUG												
15...	3.2	3.6	590	0	480	270	16	.8	17	901	1.23	15.6
SEP												
11...	3.2	3.4	620	0	510	310	16	.7	17	963	1.31	14.0

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	ARSENIC DIS-SOLVED (UG/L AS AS)	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)
OCT												
20...	.16	.13	.20	.33	.02	.00	3	190	20	170	6.3	1.1
NOV												
15...	.16	.01	.26	.27	.04	.01	6	190	30	230	3.3	.5
DEC												
07...	.41	.07	.21	.28	.06	.06	2	190	100	100	3.7	1.0
JAN												
16...	.55	.00	1.1	1.1	.07	.00	4	170	20	60	2.7	1.0
FEB												
21...	.49	.11	.13	.24	.07	.02	2	180	50	50	11	.6
MAR												
29...	.56	.17	.52	.69	1.8	.01	2	140	10	120	6.9	>5.0
APR												
17...	1.2	.05	.57	.62	.94	.04	3	120	20	20	9.6	4.8
MAY												
18...	.70	.04	.65	.69	.19	.03	2	170	70	50	6.9	1.7
JUN												
13...	.33	.00	.20	.20	.00	.01	3	230	70	110	5.3	.3
JUL												
25...	.32	.01	.31	.32	.02	.00	4	230	40	20	5.2	.3
AUG												
15...	.28	.02	.67	.69	.02	.01	1	230	30	50	7.2	.5
SEP												
11...	.10	.05	.44	.49	.01	.02	3	220	--	70	5.6	.2

09306061 PICEANCE CREEK ABOVE HUNTER CREEK, NEAR RIO BLANCO, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	COLIFORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, (COLS. PER 100 ML)	SULFIDE DISSOLVED (MG/L AS S)	BROMIDE DISSOLVED (MG/L AS BR)	SOLIDS, RESIDUE AT 105 DEG. C, DISSOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)	ALUMINUM, DISSOLVED (UG/L AS AL)	BARIUM, DISSOLVED (UG/L AS BA)
DEC 07...	1030	1	41	27	43	.0	.1	840	44	120	700
MAR 29...	1100	160	>1600	800	400	--	.1	710	2600	50	400
JUN 13...	1015	19	21	K15	--	--	.2	1080	2	0	300
SEP 11...	1030	13	41	31	210	--	.4	940	1	5	100

DATE	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, DISSOLVED (UG/L AS CU)	LEAD, DISSOLVED (UG/L AS PB)	LITHIUM DISSOLVED (UG/L AS LI)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	SELENIUM, DISSOLVED (UG/L AS SE)	STRONTIUM, DISSOLVED (UG/L AS SR)	ZINC, DISSOLVED (UG/L AS ZN)	GROSS ALPHA, DISSOLVED (UG/L AS U-NAT)
DEC 07...	0	0	1	1	20	.0	4	0	2700	20	<7.6
MAR 29...	0	0	1	2	20	.0	91	2	1700	0	23
JUN 13...	0	10	2	7	20	.0	8	0	2500	20	<8.9
SEP 11...	1	0	3	4	10	.4	8	1	2200	20	<10

DATE	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DISSOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DISSOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DISSOLVED, RADON METHOD (PCI/L)	URANIUM NATURAL DISSOLVED (UG/L AS U)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)	OIL AND GREASE (MG/L)
DEC 07...	<.7	<2.4	1.8	<2.1	1.7	.11	2.4	.00	1	--	0
MAR 29...	200	24	120	21	110	.10	4.2	.00	0	.00	0
JUN 13...	<.4	4.8	<.4	4.3	<.4	.07	5.0	.00	1	--	0
SEP 11...	<.4	4.4	<.4	4.1	<.4	.06	4.1	.00	0	.00	0

DATE	TIME	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
MAR 29...	1100	.0	0	1.5	1.2	1.2	.0	.1	.0	.0
SEP 11...	1030	.0	0	.2	.2	.0	.0	.0	.0	.0

K BASED ON NON-IDEAL COLONY COUNT.

09306061 PICEANCE CREEK ABOVE HUNTER CREEK, NEAR RIO BLANCO, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	HEPTA-CHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTA-CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALA-THION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHYL PARA-THION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRI-THION, TOT. IN BOTTOM MATL. (UG/KG)	PARA-THION, TOTAL IN BOTTOM MATERIAL (UG/KG)	TOXA-PHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRI-THION, TOTAL IN BOTTOM MATERIAL (UG/KG)	2,4-D, TOTAL IN BOTTOM MATERIAL (UG/KG)
MAR 29...	.0	.0	.0	.0	.0	.0	.0	0	.0	0
SEP 11...	.0	.0	.0	.0	.0	.0	.0	0	.0	0

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1470	1440	1400	1360	1310	1130	---	1020	1400	1360	1320	1440
2	1480	1440	1320	1400	1320	1100	---	1030	1400	1370	1300	1430
3	1480	1440	1330	1290	1320	1050	---	1010	1420	1370	1300	1440
4	1480	1440	1340	1290	1310	1000	---	986	1420	1390	1320	1430
5	1510	1450	1540	1300	1320	1130	616	984	1410	1390	1300	1400
6	1540	1460	1340	1300	1310	1130	685	---	---	1380	1300	1400
7	1540	1470	1340	1300	1310	1140	---	---	---	1380	1300	1380
8	1570	1490	1340	1330	1320	1130	---	---	---	1400	1300	1360
9	1570	1480	1360	1310	1330	1120	---	1170	---	1420	1290	1370
10	1550	1450	1310	1310	1320	---	---	1140	---	1410	1260	1380
11	1520	1430	1320	1300	1320	---	---	1120	---	1410	1270	1370
12	1510	1410	1320	1310	1320	---	---	1110	---	1400	1310	1370
13	1510	1410	1330	1300	1320	---	---	1130	1450	1410	1370	1370
14	1540	1420	1320	1310	1320	---	---	1150	1420	1410	1330	1370
15	1540	1530	1320	1300	1330	---	---	1120	1440	1420	1340	1360
16	1540	1530	1270	1300	1320	---	---	1110	1450	1420	1340	1340
17	1510	1520	1370	1300	1360	---	870	1110	1440	1400	1330	1340
18	1510	1520	1290	1290	1350	1220	879	1120	1450	1320	1340	1330
19	1520	1500	1330	1310	1090	1160	910	1180	1440	1270	1400	1390
20	1430	1480	1380	1290	1070	1140	935	1210	1440	1290	1410	1390
21	1430	1400	1420	1300	1180	1120	931	1220	1440	1300	1410	1380
22	1440	1330	1290	1310	1130	1120	957	1230	1430	1300	1390	1380
23	1410	1480	1300	1290	1130	1130	1020	1260	1420	1300	1380	1370
24	1410	1390	1310	1300	1130	1140	1070	1280	1410	1300	1360	1370
25	1400	1360	1320	1310	1140	1210	1080	1280	1420	1280	1320	1350
26	1440	1450	1320	1300	1140	1210	1090	1290	1420	1310	1400	1310
27	1440	1490	1330	1290	1120	1200	1070	1290	1400	1310	1420	1280
28	1440	1460	1310	1340	1110	1160	1150	1280	1380	1320	1420	1280
29	1440	1470	1300	1300	---	1040	1130	1280	1380	1310	1420	1310
30	1440	1410	1300	1310	---	776	1060	1310	1370	1300	1430	1390
31	1430	---	1280	1320	---	---	---	1350	---	1320	1430	---

GREEN RIVER BASIN

09306061 PICEANCE CREEK ABOVE HUNTER CREEK, NEAR RIO BLANCO, CO--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	13.5	4.5	8.0	2.5	3.0	.0	1.0	.0	6.0	1.5	6.5	4.0
2	14.0	4.5	9.5	3.0	6.5	2.5	.5	.0	5.5	.5	7.5	2.5
3	16.0	7.0	10.0	4.0	7.0	5.0	1.5	.5	4.5	.5	2.5	.0
4	18.0	11.5	10.0	4.5	6.5	4.5	4.0	1.5	6.0	.0	6.0	.0
5	17.0	10.0	11.0	5.5	5.0	1.5	5.0	2.5	5.0	.5	8.5	4.0
6	14.5	9.5	9.5	7.0	4.0	.5	4.5	3.0	7.5	3.5	8.5	3.5
7	14.5	8.5	11.0	7.0	4.5	1.5	4.0	.0	9.0	4.0	11.5	4.0
8	14.5	6.5	8.0	3.0	4.0	1.0	2.5	.0	6.5	2.5	11.0	1.5
9	12.5	6.5	7.0	1.0	3.0	.0	5.0	1.0	4.0	.5	10.5	2.5
10	10.0	6.0	8.0	1.5	6.0	2.0	5.0	3.5	6.5	3.5	---	---
11	12.0	4.0	8.0	2.5	5.5	1.5	5.5	3.0	5.5	3.0	---	---
12	12.5	4.0	10.0	4.0	5.0	3.0	4.5	2.0	3.0	.5	---	---
13	13.0	4.5	8.0	3.0	4.0	.5	4.5	.5	7.0	1.0	---	---
14	13.5	5.5	8.0	3.5	6.0	2.5	4.0	.5	6.5	2.0	---	---
15	13.5	5.5	8.0	6.5	7.0	4.0	5.0	3.5	5.0	.5	---	---
16	13.5	5.5	8.0	3.0	4.0	.0	5.0	2.5	5.5	1.0	---	---
17	13.0	5.5	7.5	3.0	1.0	.0	5.0	2.5	3.5	.0	---	---
18	13.0	5.0	8.5	5.5	3.5	1.0	5.0	2.0	3.0	.0	13.0	2.5
19	11.0	5.0	6.5	.5	1.5	.0	3.0	.0	5.0	.5	10.0	3.5
20	12.0	6.5	3.0	.0	.5	.0	5.0	2.0	5.0	1.5	13.5	3.5
21	12.0	8.0	2.5	.0	.5	.0	6.0	2.0	7.5	2.5	14.5	3.5
22	12.5	7.0	6.5	2.0	1.0	.5	4.5	.0	7.0	.0	8.0	5.5
23	12.0	5.0	6.5	3.0	2.5	.5	3.0	.5	7.5	.5	8.5	4.5
24	11.0	5.5	5.5	2.0	4.0	.5	2.5	.0	7.5	.0	8.5	3.0
25	12.0	5.0	7.5	4.5	6.0	.5	3.0	.0	8.5	2.0	13.5	2.5
26	12.5	5.0	7.5	4.5	3.5	.5	3.5	1.0	9.0	4.0	14.5	3.5
27	12.0	5.0	5.0	3.0	3.0	.5	5.0	1.0	8.0	4.0	15.5	4.5
28	12.0	5.5	6.0	3.0	5.5	2.5	2.5	.0	8.5	1.5	15.0	4.5
29	10.5	6.5	4.5	1.0	5.5	3.5	5.5	.0	---	---	14.5	8.5
30	10.5	7.0	5.0	2.0	7.0	3.5	5.5	.5	---	---	12.5	2.5
31	7.0	5.0	---	---	4.0	.5	4.5	.5	---	---	---	---

09306061 PICEANCE CREEK ABOVE HUNTER CREEK, NEAR RIO BLANCO, CO--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	14.5	5.5	19.5	6.5	21.5	10.5	20.0	12.0	19.5	10.0
2	---	---	16.5	6.0	18.5	6.5	21.0	10.0	22.5	11.5	18.5	10.0
3	---	---	13.0	7.5	16.5	7.5	20.5	10.0	22.5	12.0	20.5	10.0
4	---	---	14.0	5.5	18.0	9.0	21.0	8.5	22.5	11.5	20.0	10.0
5	9.5	5.5	10.0	5.0	16.5	8.5	21.5	8.5	18.0	10.5	21.5	10.5
6	11.5	5.5	8.5	4.5	---	---	20.5	10.0	22.0	15.5	21.0	11.0
7	---	---	9.5	4.5	---	---	22.5	9.5	20.5	11.5	20.0	12.0
8	---	---	11.5	5.0	---	---	22.5	9.5	22.5	12.0	19.0	11.0
9	---	---	16.0	4.0	---	---	21.5	9.5	21.5	11.5	19.0	10.0
10	---	---	16.0	6.0	---	---	22.0	10.0	20.0	13.0	18.0	11.0
11	---	---	12.0	7.0	---	---	22.0	11.0	18.0	12.5	16.0	13.5
12	---	---	16.5	5.0	---	---	23.5	10.5	21.0	12.5	17.0	8.5
13	---	---	18.5	5.5	22.0	8.0	25.0	8.5	19.0	12.5	17.0	7.0
14	---	---	19.0	7.0	20.5	8.5	26.0	9.0	14.5	10.5	14.0	7.5
15	---	---	19.0	7.5	21.5	8.0	21.5	9.5	21.0	8.0	17.5	9.0
16	---	---	18.5	8.0	21.0	7.5	20.5	10.5	20.5	9.5	18.0	9.5
17	7.0	3.5	11.5	6.5	21.0	7.0	22.0	11.5	20.5	9.5	18.5	11.5
18	11.5	1.5	13.0	8.5	20.0	7.0	20.5	12.0	20.0	9.5	13.5	9.0
19	12.0	3.5	18.5	5.0	20.5	8.5	20.5	13.5	21.5	7.5	10.0	7.0
20	14.5	4.0	19.0	6.5	22.5	7.5	22.5	15.0	20.5	9.0	13.0	7.0
21	7.5	4.5	13.0	9.5	22.0	8.5	21.5	12.0	20.5	10.5	15.0	5.0
22	12.0	2.0	18.0	7.5	22.5	8.5	22.5	10.5	18.0	12.5	16.0	6.0
23	18.5	3.5	18.0	8.5	22.0	9.5	22.0	11.0	21.5	11.0	17.0	7.5
24	12.5	4.0	17.5	7.5	22.0	11.0	21.0	11.0	21.5	10.0	15.0	8.0
25	12.5	7.0	16.5	7.5	20.0	10.5	23.5	14.0	18.5	11.0	17.5	8.5
26	15.5	5.5	18.0	6.5	20.5	8.5	23.5	12.0	21.5	10.0	17.0	8.5
27	12.0	6.5	16.0	8.0	18.5	9.5	24.5	11.5	20.5	8.5	16.5	8.5
28	13.5	6.0	17.5	7.5	18.5	11.5	21.0	13.0	21.0	8.5	16.5	9.0
29	13.0	6.0	17.0	7.0	14.5	10.5	20.5	13.0	20.5	9.0	16.5	9.0
30	13.0	6.5	18.0	8.5	19.5	10.5	24.0	12.5	19.0	9.0	16.5	7.5
31	---	---	18.0	8.0	---	---	19.5	11.5	19.5	10.5	---	---

09306061 PICEANCE CREEK ABOVE HUNTER CREEK, NEAR RIO BLANCO, CO--Continued

PH (UNITS), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.2	8.1	8.4	8.4	8.4	8.3	---	8.1	8.5	8.4	8.2	8.1
2	8.2	8.1	8.4	8.3	8.4	8.3	---	8.0	8.5	8.4	8.2	8.1
3	8.2	8.1	8.4	8.4	8.4	8.3	---	8.0	8.5	8.4	8.2	8.1
4	8.1	8.1	8.4	8.4	8.4	8.3	---	8.0	8.5	8.4	8.3	8.1
5	8.1	8.1	8.4	8.4	8.4	8.2	8.2	8.0	8.5	8.4	8.4	8.1
6	8.1	8.1	8.4	8.4	8.3	8.2	8.2	8.2	---	8.4	8.3	8.1
7	8.1	8.1	8.4	8.4	8.3	8.2	---	8.2	---	8.3	8.3	8.1
8	8.1	8.1	8.4	8.4	8.3	8.2	---	8.5	---	8.2	8.3	8.2
9	8.1	8.1	8.4	8.4	8.4	8.2	---	8.5	---	8.2	8.3	8.1
10	8.1	8.1	8.4	8.4	8.4	---	---	8.5	---	8.2	8.3	8.1
11	8.1	8.1	8.4	8.4	8.3	---	---	8.5	---	8.2	8.3	8.2
12	8.2	8.1	8.4	8.4	8.4	---	---	8.5	---	8.2	8.2	8.1
13	8.2	8.1	8.4	8.5	8.4	---	---	8.5	8.5	8.2	8.3	8.1
14	8.1	8.1	8.4	8.4	8.4	---	---	8.5	8.5	8.2	8.5	8.1
15	8.1	8.1	8.4	8.4	8.4	---	---	8.5	8.4	8.2	8.2	8.1
16	8.1	8.1	8.5	8.4	8.4	---	---	8.5	8.4	8.2	8.2	8.2
17	8.1	8.1	8.4	8.3	8.4	---	8.3	8.5	8.5	8.3	8.2	8.1
18	8.1	8.1	8.4	8.3	8.3	8.3	8.3	8.5	8.4	8.2	8.2	8.2
19	8.1	8.1	8.4	8.4	8.4	8.3	8.3	8.5	8.4	8.3	8.2	8.2
20	8.2	8.2	8.4	8.4	8.4	8.3	8.3	8.5	8.5	8.3	8.1	8.2
21	8.1	8.3	8.3	8.4	8.3	8.3	8.3	8.4	8.5	8.2	8.1	8.2
22	8.1	8.3	8.4	8.4	8.3	8.3	8.3	8.4	8.5	8.2	8.1	8.2
23	8.1	8.3	8.4	8.4	8.3	8.3	8.2	8.4	8.5	8.2	8.1	8.2
24	8.1	8.3	8.4	8.4	8.3	8.3	8.2	8.4	8.5	8.2	8.2	8.2
25	8.1	8.3	8.4	8.4	8.2	8.2	8.2	8.4	8.5	8.2	8.2	8.2
26	8.1	8.3	8.4	8.4	8.2	8.3	8.1	8.4	8.5	8.2	8.2	8.4
27	8.1	8.3	8.4	8.3	8.2	8.3	8.2	8.4	8.5	8.2	8.2	8.5
28	8.1	8.3	8.4	8.3	8.3	8.2	8.0	8.5	8.5	8.2	8.2	8.5
29	8.0	8.3	8.4	8.3	---	8.1	8.0	8.5	8.4	8.2	8.1	8.3
30	8.1	8.4	8.4	8.3	---	8.1	8.1	8.5	8.4	8.2	8.1	8.2
31	8.1	---	8.5	8.3	---	---	---	8.5	---	8.2	8.1	---

09306061 PICEANCE CREEK ABOVE HUNTER CREEK, NEAR RIO BLANCO, CO--Continued

DISSOLVED OXYGEN (DO), MG/L, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	11.3	7.4	12.0	7.9	9.3	8.0	8.2	7.8	10.8	9.7	9.8	9.0
2	11.4	7.1	12.2	7.7	9.1	8.1	8.1	7.4	10.9	9.8	9.8	8.8
3	12.4	3.9	12.0	7.7	8.9	8.1	7.8	7.6	10.9	9.9	10.4	9.8
4	4.2	3.6	11.9	7.5	9.2	8.0	8.1	7.6	11.0	9.7	10.7	9.2
5	11.6	3.7	12.4	7.4	9.4	8.1	8.3	7.6	10.9	9.9	9.8	8.7
6	13.1	6.5	11.6	7.2	9.3	8.3	8.0	7.6	10.2	9.0	9.8	8.7
7	12.2	6.4	12.2	7.0	9.6	7.5	8.4	7.6	10.1	8.7	9.8	8.1
8	12.4	6.6	10.5	7.1	9.2	7.5	8.2	7.6	10.1	9.2	10.4	8.2
9	12.1	6.6	10.6	7.2	9.3	7.7	8.3	7.5	10.8	9.9	10.2	8.2
10	11.7	6.7	11.0	7.4	8.7	7.4	8.0	7.4	10.2	9.3	---	---
11	12.0	7.0	11.3	7.7	8.9	7.4	8.0	7.4	9.9	9.5	---	---
12	12.0	6.8	11.5	7.8	9.0	7.5	8.3	7.6	10.8	10.0	---	---
13	12.0	6.8	11.7	8.0	9.1	7.6	8.4	7.5	10.9	9.5	---	---
14	12.4	6.9	11.5	8.1	9.0	7.3	8.3	7.5	10.7	9.6	---	---
15	12.5	6.7	10.7	6.9	8.7	7.0	7.9	7.2	10.8	9.9	---	---
16	11.9	6.6	10.5	6.8	8.5	7.0	8.4	7.5	10.8	10.0	---	---
17	12.2	6.4	10.4	6.8	8.0	7.5	8.2	7.5	10.8	10.4	---	---
18	12.2	6.7	10.2	6.7	8.1	7.4	8.3	7.5	10.9	10.2	11.0	8.5
19	11.7	6.7	8.8	6.6	8.2	7.5	8.2	7.5	11.0	9.8	10.6	9.1
20	13.3	7.7	9.3	6.7	8.1	7.8	8.2	7.4	10.8	9.9	10.6	8.3
21	13.3	7.6	8.4	7.7	8.0	7.7	8.3	7.3	11.0	9.4	10.7	8.1
22	13.6	7.7	8.9	7.7	7.8	7.5	8.3	7.4	11.0	9.4	10.1	9.3
23	13.3	7.5	9.0	7.7	8.2	7.6	7.9	7.4	10.9	9.2	10.3	9.1
24	12.9	7.5	9.0	8.0	8.5	7.7	8.0	6.8	10.6	8.9	10.9	9.3
25	13.0	7.6	9.1	7.9	8.6	7.7	8.0	7.3	10.3	8.7	10.9	8.4
26	13.3	7.6	9.3	7.6	8.7	7.7	8.2	7.5	9.8	8.4	10.7	8.1
27	13.0	7.6	9.0	7.7	8.3	7.8	8.6	7.7	9.7	8.7	10.6	7.9
28	13.1	7.6	9.3	7.8	8.4	7.5	8.2	7.5	10.4	8.7	10.4	7.9
29	12.4	7.6	9.4	8.0	8.3	7.5	8.5	7.6	---	---	10.2	8.0
30	12.3	7.5	9.7	8.0	8.6	7.2	8.5	7.5	---	---	10.9	8.5
31	11.2	7.8	---	---	8.6	7.4	10.7	7.7	---	---	---	---

09306061 PICEANCE CREEK ABOVE HUNTER CREEK, NEAR RIO BLANCO, CO--Continued

DISSOLVED OXYGEN (DO), MG/L, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	9.5	7.4	9.7	8.7	7.8	5.1	8.9	6.9	12.0	5.6
2	---	---	9.1	7.1	10.2	7.8	7.9	4.5	8.9	6.3	12.1	5.6
3	---	---	8.8	6.9	10.7	8.1	7.9	5.2	8.7	6.0	12.0	5.2
4	---	---	9.1	6.3	11.4	7.9	7.8	5.1	9.2	6.2	12.1	5.2
5	10.2	9.0	9.2	3.9	11.6	8.1	7.7	5.0	8.1	6.7	12.3	5.1
6	9.7	8.3	9.4	3.7	---	---	7.5	5.1	8.9	6.9	11.7	5.1
7	---	---	9.2	8.3	---	---	7.4	4.9	9.5	7.2	12.0	5.1
8	---	---	9.4	8.4	---	---	7.1	4.7	9.6	6.9	11.2	5.2
9	---	---	10.0	7.5	---	---	6.9	4.9	9.9	7.0	9.2	4.3
10	---	---	9.5	7.6	---	---	6.7	5.0	10.0	6.7	8.5	3.1
11	---	---	9.3	8.3	---	---	6.5	5.0	10.3	6.9	11.1	6.6
12	---	---	9.8	7.6	---	---	6.6	4.8	11.0	6.5	9.9	5.9
13	---	---	9.7	7.4	8.4	5.8	7.0	4.6	10.9	6.6	9.4	5.0
14	---	---	9.2	7.2	8.1	5.5	7.0	4.5	10.9	6.8	8.1	4.6
15	---	---	9.2	7.2	8.8	5.3	7.0	5.1	11.6	6.6	7.9	4.6
16	---	---	9.1	7.2	9.6	5.2	7.1	4.7	11.6	6.3	8.3	4.4
17	10.9	10.1	9.4	8.4	10.1	5.3	7.3	5.0	11.7	6.4	7.6	4.2
18	11.5	9.0	9.7	9.1	10.4	4.9	6.7	5.1	12.0	6.3	10.1	4.5
19	10.9	8.7	9.8	7.5	10.3	5.0	6.6	5.1	12.1	5.9	10.3	6.7
20	10.4	8.1	9.4	7.4	10.6	4.9	7.3	6.2	12.2	5.7	10.6	6.7
21	10.3	9.3	8.7	8.0	10.0	4.9	8.6	7.1	12.1	5.6	10.4	6.3
22	11.0	8.6	8.9	7.2	10.4	4.9	9.2	6.9	11.5	5.6	10.3	6.0
23	10.3	8.1	8.6	7.2	8.7	4.9	9.1	6.8	11.7	5.2	10.2	4.3
24	9.9	7.0	8.8	7.5	8.8	4.6	9.2	7.3	11.6	5.1	10.1	5.7
25	9.1	7.8	8.9	7.7	8.8	4.8	9.2	6.5	11.8	5.3	10.3	5.7
26	9.2	6.1	9.1	7.6	8.9	4.8	8.9	6.5	12.9	5.7	10.2	5.9
27	8.7	7.6	9.2	8.0	7.8	5.1	8.9	6.5	12.9	5.8	9.5	5.9
28	9.4	7.4	9.5	7.8	8.3	5.3	8.9	6.9	13.0	5.7	9.4	4.3
29	9.2	7.5	9.6	7.6	8.6	5.6	8.9	6.9	12.8	5.8	9.3	5.5
30	9.1	7.8	9.5	7.9	8.8	5.1	8.8	6.4	12.4	5.7	9.8	5.6
31	---	---	9.9	8.0	---	---	9.0	6.9	12.8	5.6	---	---

09306061 PICEANCE CREEK ABOVE HUNTER CREEK, NEAR RIO BLANCO, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	3.1	33	.28	5.7	20	.31	8.9	---	2.5
2	2.8	28	.21	5.6	47	.71	11	---	4.5
3	.50	23	.03	5.3	53	.75	10	---	3.5
4	.00	---	.00	5.0	59	.79	10	---	3.5
5	.00	---	.00	4.4	28	.34	10	---	3.5
6	.59	73	.16	4.3	20	.23	10	---	3.5
7	1.1	57	.17	4.0	29	.31	10	---	3.5
8	1.2	56	.19	3.8	23	.24	11	---	4.5
9	1.6	72	.32	2.9	---	.10	14	187	8.8
10	2.1	72	.40	2.9	---	.07	12	---	3.2
11	2.1	63	.36	3.3	64	.57	12	---	2.8
12	2.0	68	.37	3.2	81	.71	12	79	2.6
13	.57	56	.10	3.5	630	5.9	11	148	4.4
14	.04	36	.00	3.7	59	.59	12	142	4.5
15	.37	22	.03	3.8	49	.50	12	278	8.8
16	1.8	32	.17	3.6	73	.71	12	232	7.8
17	2.6	43	.30	4.1	94	1.0	13	---	8.0
18	3.8	23	.24	4.9	72	.96	13	---	8.0
19	4.0	22	.24	4.2	88	1.0	12	---	7.5
20	4.3	23	.27	9.4	122	3.8	12	---	7.5
21	6.4	---	.30	12	229	8.0	13	---	8.0
22	6.3	---	.65	7.9	144	3.1	13	---	8.0
23	5.7	43	.66	7.6	155	3.3	9.8	215	5.7
24	6.2	49	.82	11	187	5.3	8.4	183	4.2
25	5.5	27	.40	11	154	4.5	7.6	216	4.4
26	6.6	13	.23	7.6	138	2.9	7.8	204	4.3
27	4.9	18	.24	7.3	120	2.4	8.2	193	4.3
28	5.1	40	.56	7.2	133	2.6	8.0	161	3.5
29	5.3	15	.22	7.4	96	1.9	8.7	103	2.4
30	5.6	19	.31	8.4	---	2.0	9.1	101	2.5
31	5.9	22	.35	---	---	---	9.2	121	3.0
TOTAL	98.07	---	8.58	175.0	---	55.59	330.7	---	153.2

09306061 PICEANCE CREEK ABOVE HUNTER CREEK, NEAR RIO BLANCO, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JANUARY			FEBRUARY			MARCH	
1	10	218	5.9	10	140	3.9	9.3	---	3.0
2	9.6	298	7.7	12	224	8.9	10	---	3.5
3	9.5	250	6.4	17	285	22	10	---	3.5
4	9.7	222	5.8	12	200	7.6	14	---	8.5
5	9.6	160	4.2	10	177	5.1	9.3	---	3.0
6	9.4	184	4.7	9.4	143	3.7	10	---	3.5
7	10	186	5.0	9.5	166	4.3	11	---	4.5
8	10	194	5.2	8.7	139	3.3	11	---	4.5
9	9.8	158	4.3	7.7	141	2.9	12	---	6.0
10	10	---	4.0	7.6	121	2.5	12	195	6.1
11	11	---	4.0	7.8	125	2.6	11	222	6.9
12	11	124	3.6	8.0	128	2.8	11	271	8.2
13	11	---	3.5	8.0	101	2.2	11	267	8.2
14	11	---	3.5	8.4	106	2.4	12	245	7.9
15	11	---	3.0	8.8	168	4.1	13	449	26
16	11	93	2.8	9.0	136	3.3	17	444	14
17	11	88	2.6	13	210	8.1	11	404	12
18	11	64	1.9	19	233	13	12	225	8.2
19	10	141	3.9	18	279	20	14	142	5.0
20	9.9	86	2.3	9.6	122	3.2	16	257	12
21	9.5	80	2.1	9.4	125	3.2	16	292	13
22	9.2	111	2.8	12	243	9.3	16	294	13
23	9.4	64	1.6	11	219	8.0	17	291	13
24	12	146	5.0	10	202	6.5	18	303	14
25	25	150	12	9.0	165	4.0	17	284	13
26	9.6	69	1.8	9.6	163	4.2	17	290	13
27	9.5	30	.77	9.9	---	3.5	16	268	11
28	15	256	13	9.5	---	3.0	17	267	12
29	9.9	153	4.1	---	---	---	25	760	52
30	9.6	76	2.0	---	---	---	32	2780	241
31	10	111	3.2	---	---	---	43	3750	466
TOTAL	334.2	---	133.07	293.9	---	167.6	470.6	---	1015.5

09306061 PICEANCE CREEK ABOVE HUNTER CREEK, NEAR RIO BLANCO, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	56	4110	637	24	1110	72	15	---	10
2	53	3390	510	24	753	48	19	---	13
3	41	---	320	26	1080	78	19	---	13
4	32	2230	188	34	1290	118	20	---	15
5	39	2730	293	31	1530	126	24	---	30
6	31	---	90	27	1480	108	60	2560	858
7	33	1420	132	26	1350	96	18	344	20
8	30	408	32	26	1210	83	6.8	176	3.2
9	29	2450	195	25	1240	86	5.7	129	2.0
10	30	1770	142	22	735	43	4.5	100	1.2
11	28	1610	122	20	643	35	3.7	81	.81
12	27	1860	135	20	476	26	8.5	91	2.1
13	27	1810	135	16	311	13	8.1	106	2.3
14	27	---	130	14	520	20	4.1	67	.74
15	26	---	130	17	636	30	3.8	67	.68
16	25	---	100	18	670	32	1.0	56	.16
17	25	---	100	17	599	28	1.4	37	.14
18	25	---	100	18	463	23	1.5	37	.15
19	25	---	100	17	438	19	1.5	33	.13
20	23	---	90	15	470	19	1.0	33	.09
21	23	1430	88	18	393	19	2.4	70	.51
22	21	1290	74	22	404	26	5.0	83	1.1
23	18	1620	80	19	801	41	4.8	71	.91
24	16	1770	77	17	---	30	5.0	---	.95
25	12	1560	51	19	---	40	3.6	71	.69
26	13	1410	50	17	---	30	5.7	82	1.3
27	14	1150	46	16	626	27	9.5	110	2.8
28	9.0	818	20	17	757	35	9.0	130	3.2
29	12	1030	33	19	698	35	13	140	4.8
30	18	1270	61	15	368	15	15	158	6.4
31	---	---	---	12	90	2.9	---	---	---
TOTAL	788.0	---	4261	628	---	1401.9	299.6	---	995.36

09306061 PICEANCE CREEK ABOVE HUNTER CREEK, NEAR RIO BLANCO, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JULY			AUGUST			SEPTEMBER	
1	14	180	6.8	7.4	67	1.3	2.6	---	.15
2	13	---	10	8.7	33	.77	2.5	---	.16
3	10	---	8.0	8.2	26	.57	2.2	---	.14
4	6.6	170	3.0	9.0	---	.58	2.3	---	.16
5	6.0	165	2.7	10	23	.62	3.3	25	.23
6	5.5	173	2.6	10	26	.72	4.0	21	.23
7	4.8	96	1.2	9.8	---	.64	4.5	24	.29
8	2.4	---	.50	9.6	20	.51	4.9	21	.28
9	1.1	84	.25	7.4	10	.20	4.9	25	.33
10	1.3	79	.28	11	42	1.2	5.4	35	.51
11	1.9	58	.30	10	---	.85	5.8	40	.63
12	3.4	---	.45	5.6	31	.48	7.0	57	1.1
13	2.3	44	.28	4.0	21	.23	6.4	59	1.0
14	1.0	41	.12	6.0	14	.23	6.7	72	1.3
15	.21	68	.04	5.9	10	.15	6.5	---	1.0
16	.17	---	.04	5.7	10	.16	6.1	---	1.0
17	.15	92	.04	5.7	14	.21	6.1	---	1.0
18	11	207	6.4	4.8	14	.18	6.5	65	1.2
19	12	194	6.4	3.0	---	.12	4.5	55	.67
20	13	186	6.4	2.8	---	.12	4.9	46	.61
21	8.6	173	4.2	3.1	17	.14	5.6	50	.75
22	12	190	6.3	4.1	11	.12	5.8	21	.36
23	12	91	3.1	4.5	6	.07	6.0	51	.81
24	12	---	2.0	5.1	---	.15	5.5	44	.65
25	11	57	1.6	6.8	10	.19	7.0	38	.72
26	9.5	64	1.7	3.4	10	.09	9.8	28	.75
27	8.1	63	1.4	2.9	13	.10	10	28	.77
28	7.9	82	1.8	3.0	---	.12	7.6	22	.47
29	8.0	62	1.3	3.0	18	.15	5.2	---	.17
30	8.0	102	2.2	3.3	---	.16	4.8	17	.21
31	6.9	54	1.0	3.4	22	.20	---	---	---
TOTAL	213.83	---	82.40	187.2	---	11.33	164.4	---	17.63
YEAR	3983.50		8303.16						

09306175 BLACK SULPHUR CREEK NEAR RIO BLANCO, CO

LOCATION.--Lat 39°52'16", long 108°17'18", in SE¼SW¼ sec.16, T.2 S., R.97 W., Rio Blanco County, Hydrologic Unit 14050006, on right bank 600 ft (183 m) upstream from mouth, 0.2 mi (0.3 km) west of Rock School, and 23.7 mi (38.1 km) northwest of Rio Blanco.

DRAINAGE AREA.--103 mi² (267 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--December 1974 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,130 ft (1,868 m), from topographic map.

REMARKS.--Records good. Diversions for irrigation of about 160 acres (648,000 m²) above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 44 ft³/s (1.26 m³/s) June 7, 1975, gage height, 1.56 ft (0.475 m); minimum daily, 0.20 ft³/s (0.006 m³/s) May 12, 13, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7.9 ft³/s (0.224 m³/s) at 1800 Feb. 26, gage height, 1.86 ft (0.567 m); minimum daily, 0.20 ft³/s (0.006 m³/s) May 12, 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.2	3.8	4.2	2.4	2.8	4.2	4.6	2.2	.90	1.8	3.0	.50
2	3.4	3.6	4.4	2.0	2.0	3.8	4.8	2.4	1.0	1.8	2.8	.51
3	3.2	3.6	4.4	3.4	1.2	3.4	4.8	2.6	1.0	1.6	2.6	.48
4	2.8	3.6	4.4	3.8	1.4	3.5	4.2	2.3	1.4	1.2	2.4	.50
5	2.8	3.6	4.6	3.5	1.6	3.5	4.6	2.8	2.8	1.2	2.2	.47
6	3.0	3.8	4.4	3.5	3.4	3.6	4.2	3.5	1.4	1.2	2.2	.51
7	3.2	3.8	4.4	3.4	3.4	3.8	4.0	2.7	1.1	1.2	1.4	.40
8	3.0	3.5	4.4	2.8	2.3	4.0	4.0	3.0	1.1	1.2	.40	.38
9	3.0	3.4	4.0	3.2	1.5	4.0	3.8	1.9	1.0	1.2	.75	.34
10	3.0	3.5	4.2	3.2	2.6	4.8	3.8	.75	1.0	1.2	.90	.32
11	3.2	3.8	4.2	3.2	4.8	4.8	3.5	.30	1.0	1.3	.90	.27
12	3.5	3.8	4.0	2.8	4.6	4.6	3.4	.20	1.0	1.3	1.0	.26
13	3.6	3.8	3.8	3.0	5.2	4.4	3.4	.20	.75	1.2	.90	.36
14	3.6	3.8	4.0	3.0	4.2	4.6	3.4	.50	.63	1.2	1.1	.35
15	3.6	3.8	4.0	3.0	4.0	4.4	3.2	.75	.63	1.1	1.0	.40
16	3.6	3.6	3.8	3.0	4.0	4.0	3.0	.90	.50	1.0	1.0	.38
17	3.6	3.8	3.0	3.0	3.5	4.8	3.0	1.4	.75	1.0	.90	.45
18	3.6	3.8	4.0	2.8	3.2	4.6	3.2	1.5	1.1	.90	.91	1.5
19	3.6	3.4	3.2	2.7	3.6	4.8	2.7	1.5	1.4	.75	1.1	1.3
20	3.8	3.0	2.2	2.8	4.0	4.6	2.3	1.2	1.6	.75	1.0	1.4
21	3.8	3.4	2.0	2.8	3.8	4.2	2.3	1.5	1.9	.63	1.1	1.2
22	3.8	4.2	2.9	2.7	3.6	3.2	2.2	1.4	1.9	1.2	1.2	1.3
23	3.8	4.4	3.4	2.7	4.0	3.4	2.3	1.5	2.0	1.9	1.0	1.3
24	3.6	4.4	3.4	2.0	4.2	5.4	1.6	1.6	2.2	1.8	.97	1.3
25	3.8	4.6	3.0	3.0	4.6	4.8	1.6	1.5	2.0	1.5	.99	1.3
26	4.6	4.6	3.4	3.0	5.2	4.6	1.6	1.4	1.9	1.9	1.0	1.4
27	4.4	4.6	3.5	3.2	5.2	4.4	1.9	1.2	1.5	1.8	.99	1.5
28	4.4	4.6	3.4	2.8	4.6	4.2	2.0	1.4	1.9	1.4	.77	1.4
29	4.2	4.2	3.4	3.4	---	4.2	2.2	1.6	2.2	1.2	.80	1.4
30	4.0	4.2	3.4	2.7	---	4.2	2.2	1.6	1.9	1.6	1.0	1.4
31	3.8	---	3.4	3.0	---	4.2	---	1.1	---	2.7	.82	---
TOTAL	110.5	116.0	114.8	91.8	98.5	131.0	93.8	48.40	41.46	41.93	39.10	24.58
MEAN	3.56	3.87	3.70	2.96	3.52	4.23	3.13	1.56	1.38	1.35	1.26	.82
MAX	4.6	4.6	4.6	3.8	5.2	5.4	4.8	3.5	2.8	2.7	3.0	1.5
MIN	2.8	3.0	2.0	2.0	1.2	3.2	1.6	.20	.50	.63	.40	.26
AC-FT	219	230	228	182	195	260	186	96	82	83	78	49

CAL YR 1977 TOTAL 1506.40 MEAN 4.13 MAX 7.8 MIN 1.0 AC-FT 2990
WTR YR 1978 TOTAL 951.87 MEAN 2.61 MAX 5.4 MIN .20 AC-FT 1890

09306175 BLACK SULPHUR CREEK NEAR RIO BLANCO, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--January 1975 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1975 to current year.
WATER TEMPERATURE: April 1975 to current year.
SUSPENDED-SEDIMENT DISCHARGE: October 1975 to current year.

INSTRUMENTATION.--Water-quality monitor since April 1975. Pumping sediment sampler since October 1975.

EXTREMES FOR PERIOD OF RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 2,920 micromhos Oct. 16, 1975; minimum, 870 micromhos Feb. 26, 1978.
WATER TEMPERATURES: Maximum, 24.0°C July 30, 1976; minimum, 0.0°C many days during winter months.
SEDIMENT CONCENTRATIONS: Maximum daily, 19,800 mg/L Aug. 5, 1978; minimum daily, 8 mg/L Oct. 10, 1977, June 11, 1978.
SEDIMENT LOADS: Maximum daily, 147 tons (133 t) July 15, 1977; minimum daily, 0.01 ton (0.01 t) May 12-14, 1978.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 2,020 micromhos Sept. 18; minimum, 870 micromhos Feb. 26.
WATER TEMPERATURES: Maximum, 23.0°C July 3, 23, 26, 27, Aug. 3; minimum, 0.5°C Mar. 3.
SEDIMENT CONCENTRATIONS: Maximum, 19,800 mg/L Aug. 5; minimum 8 mg/L Oct. 10, June 11.
SEDIMENT LOADS: Maximum, 118 tons (107 t) Aug. 5; minimum, 0.01 ton (0.01 t) May 12-14.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
OCT											
20...	1030	3.8	1600	8.3	6.0	9.7	660	190	96	100	170
NOV											
15...	0845	3.8	1520	8.0	2.0	7.7	710	220	100	110	140
DEC											
07...	0900	4.4	1520	8.2	1.5	10.1	690	260	110	100	120
JAN											
16...	1000	3.0	1450	8.0	2.0	11.3	680	200	110	97	150
17...	1500	E3.0	1610	8.1	7.5	--	670	190	100	100	150
FEB											
21...	0930	3.8	1600	7.8	1.5	9.8	710	210	100	110	160
MAR											
28...	0830	4.2	1500	7.8	4.5	10.6	710	240	100	110	150
APR											
17...	0830	3.0	1500	7.7	3.5	10.4	670	190	100	100	160
MAY											
17...	0925	1.5	1850	7.8	8.0	6.2	800	270	120	120	180
JUN											
13...	0905	.75	1800	8.0	11.5	7.6	780	240	110	120	190
JUL											
25...	0830	1.2	1700	8.2	12.0	8.2	780	240	110	120	190
AUG											
15...	0945	1.1	1800	7.9	10.0	9.0	780	260	110	120	190
SEP											
11...	0900	.27	1750	7.5	10.5	7.4	730	210	110	110	180

E ESTIMATED.

09306175 BLACK SULPHUR CREEK NEAR RIO BLANCO, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)
OCT 20...	2.9	2.0	570	0	470	490	8.1	.5	17	1170	.06
NOV 15...	2.3	2.2	590	0	480	480	8.7	.5	17	1160	.19
DEC 07...	2.0	2.0	530	0	430	510	8.5	.5	18	1140	.27
JAN 16...	2.5	2.0	580	0	480	500	8.5	.5	20	1180	--
17...	2.5	2.2	580	0	476	520	8.8	.6	19	1190	.22
FEB 21...	2.6	2.3	610	0	500	490	9.1	.5	18	1200	.63
MAR 28...	2.5	2.0	570	0	470	480	8.9	.5	15	1150	.15
APR 17...	2.7	2.6	580	0	480	480	9.9	.5	17	1160	.16
MAY 18...	2.8	5.0	650	0	530	600	10	.5	19	1380	.52
JUN 13...	3.0	3.5	650	0	530	600	11	.5	19	1380	.36
JUL 25...	3.0	3.0	650	0	530	590	12	.6	18	1370	.17
AUG 15...	3.0	2.8	630	0	520	600	12	.6	19	1370	.22
SEP 11...	2.9	3.2	640	0	530	600	13	.6	20	1360	.19

DATE	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM DIS-SOLVED (UG/L AS CD)	COPPER, DIS-SOLVED (UG/L AS CU)
OCT 20...	.01	.07	.02	.25	.01	3	100	150	1	3
NOV 15...	.01	.20	.07	.31	.00	3	200	150	0	2
DEC 07...	.00	.27	.03	.37	.02	2	600	150	1	1
JAN 16...	--	.28	--	--	.00	4	0	140	1	2
17...	.00	.22	.03	.73	.01	1	0	140	2	2
FEB 21...	.01	.65	.07	.30	.02	2	100	150	0	1
MAR 28...	00	.15	.01	.60	.00	1	300	140	0	0
APR 17...	.00	.16	.03	.21	.01	1	0	140	0	0
MAY 18...	.01	.53	.03	.59	.06	2	100	160	2	2
JUN 13...	.00	.35	.00	.13	.02	2	200	170	2	3
JUL 25...	.01	.18	.01	.48	.03	3	200	180	0	7
AUG 15...	.00	.22	.01	.38	.01	1	0	170	1	2
SEP 11...	.01	.20	.01	.55	.01	3	100	170	2	5

09306175 BLACK SULPHUR CREEK NEAR RIO BLANCO, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)
OCT										
20...	40	0	10	90	.0	--	0	5000	--	10
NOV										
15...	30	2	20	170	.0	--	0	4600	--	10
DEC										
07...	40	1	20	90	.0	9	0	4800	2.7	10
JAN										
16...	30	2	10	40	.0	--	1	4800	--	10
17...	30	7	10	50	.0	7	0	4800	3.0	30
FEB										
21...	240	0	20	60	.0	--	1	4500	--	20
MAR										
28...	30	3	20	50	.0	11	2	4500	3.0	10
APR										
17...	20	1	20	60	.3	--	0	5400	--	20
MAY										
18...	150	5	10	100	.6	--	0	5900	--	20
JUN										
13...	80	4	20	120	.9	10	1	6200	2.0	20
JUL										
25...	90	9	20	70	1.6	--	0	5900	--	40
AUG										
15...	30	9	20	50	.6	--	1	6000	--	10
SEP										
11...	60	3	20	80	.9	10	1	6000	2.2	20

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1560	1610	1620	1650	1530	1440	1420	1750	1860	1890	1440	1860
2	1570	1570	1580	1680	1560	1400	1530	---	1890	1840	1410	1870
3	1430	1600	1520	1510	1570	1470	1540	---	1900	1820	1440	1890
4	1340	1600	1470	1480	1560	1530	1590	1510	1900	1850	1450	1890
5	1640	1580	1500	1530	1550	1510	1620	1530	1770	1880	1430	1870
6	1650	1550	1510	1530	1530	1430	1620	1480	1880	1890	1450	1880
7	1710	1580	1600	1550	1510	1430	1600	1610	1940	1880	1660	1870
8	1620	1510	1580	1560	1530	1360	1590	1710	1920	1870	1900	1870
9	1620	1540	1580	1410	1560	1200	1570	1690	1920	1850	1920	1880
10	1600	1520	1580	1420	1530	1150	1560	1750	1920	1840	1930	1870
11	1610	1500	1550	1440	1530	1270	1570	1850	1900	1860	1930	1870
12	1550	1500	1470	1400	1540	1370	1560	1960	1910	1890	1920	1870
13	1470	1470	1490	1390	1560	1510	1550	1960	1920	1890	1920	1860
14	1600	1450	1530	---	1510	1490	1520	1940	1890	1890	1910	1870
15	1590	1460	1470	---	1550	1520	1530	1920	1860	1880	1920	1880
16	1590	1600	1450	1520	1540	1490	1560	1880	1890	1890	1890	1870
17	1550	1620	1640	1570	1560	1410	1570	1920	1920	1900	1870	1860
18	1570	1600	1440	1560	1560	1350	1540	1910	1880	1900	1860	1900
19	1600	1560	1600	1570	1520	1300	1590	1930	1850	1860	1860	1860
20	1580	1660	1650	1560	1510	1330	1640	1900	1870	1840	1840	1850
21	1560	1590	1630	1590	1510	1430	1610	1890	1840	1810	1840	1850
22	1530	1560	1440	1670	1510	1370	1620	1900	1850	1840	1820	1870
23	1520	1590	1450	1580	1490	1420	1610	1880	1830	1810	1840	1880
24	1530	1540	1530	1620	1480	1410	1620	1900	1880	1830	1850	1870
25	1520	1600	1530	1600	1310	1370	1620	1880	1880	1890	1850	1870
26	1410	1630	1510	1570	1180	1320	1690	1870	1850	1850	1850	1870
27	1470	1620	1480	1580	1180	1310	1680	1880	1870	1820	1850	1860
28	1540	1600	1380	1640	1360	1350	1660	1870	1890	1840	1870	1860
29	1570	1620	1440	1560	---	1360	1630	1880	1880	1850	1860	1850
30	1630	1600	1380	1560	---	1370	1620	1860	1890	1840	1860	1840
31	1610	---	1490	1530	---	1380	---	1840	---	1720	1880	---

09306175 BLACK SULPHUR CREEK NEAR RIO BLANCO, CO--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	15.0	4.0	10.0	2.0	3.5	2.0	3.0	1.5	9.0	1.5	8.5	5.5
2	15.0	4.0	12.0	2.5	8.5	4.0	3.0	2.0	8.0	1.5	9.0	3.0
3	16.5	7.0	12.0	3.0	8.5	6.0	2.5	1.5	8.5	1.5	6.5	.5
4	15.5	6.5	12.0	4.0	8.5	5.0	6.5	2.0	9.0	1.5	9.5	1.5
5	14.0	10.5	11.5	5.0	7.0	2.0	7.5	4.0	7.0	1.5	10.5	5.0
6	15.5	9.5	10.0	6.5	6.5	2.0	6.0	3.5	10.5	5.0	12.5	4.5
7	14.5	9.0	12.5	7.0	7.5	2.0	6.5	1.5	11.5	5.5	14.5	4.0
8	15.0	5.5	7.0	2.0	6.5	1.5	3.5	1.5	9.5	2.0	14.5	2.0
9	13.0	6.0	6.0	2.0	4.5	2.0	7.5	2.5	5.5	1.5	13.5	3.5
10	11.5	5.5	9.0	2.0	8.5	2.5	7.0	5.0	9.5	4.5	12.5	3.5
11	13.0	3.0	9.5	2.0	8.0	2.0	7.5	3.0	8.0	3.0	11.5	4.5
12	13.5	2.5	11.0	3.5	7.0	3.0	7.0	3.0	5.5	1.5	10.5	5.5
13	14.0	3.5	10.0	2.0	7.0	1.5	8.0	1.5	9.0	1.5	12.0	4.0
14	14.5	4.5	9.5	2.0	8.5	3.5	---	---	9.0	3.0	10.5	2.0
15	15.0	4.5	9.5	3.0	8.5	4.5	---	---	7.5	1.5	12.0	1.0
16	15.0	5.0	9.5	2.0	4.5	1.0	8.0	2.5	9.0	1.5	13.0	1.5
17	15.0	5.0	8.5	2.0	3.5	1.5	8.0	4.5	6.0	1.5	16.0	1.5
18	14.5	4.5	9.5	5.5	5.5	1.5	8.0	2.5	4.5	1.5	15.5	3.0
19	13.0	4.5	6.0	1.5	3.5	1.5	6.5	1.5	8.0	1.5	12.5	4.5
20	13.5	6.5	3.5	1.5	3.5	1.5	8.0	3.5	9.0	2.5	17.5	4.5
21	12.0	8.0	3.5	2.0	3.5	2.0	8.5	2.5	10.5	1.5	18.0	4.0
22	13.5	6.5	5.5	2.0	3.0	2.0	7.0	1.5	11.0	1.5	9.0	6.0
23	13.5	4.5	8.5	2.0	3.0	1.5	4.5	1.5	11.5	1.5	12.0	5.5
24	12.5	4.5	7.5	2.0	6.0	1.5	5.5	1.5	11.5	1.5	11.5	4.0
25	14.0	4.5	9.5	4.5	5.0	1.5	5.5	2.0	11.0	3.5	16.0	3.5
26	14.0	4.5	10.0	4.0	6.0	2.0	6.5	2.0	11.0	4.0	18.0	4.0
27	13.5	4.5	7.0	2.5	5.0	2.0	8.0	1.5	10.5	4.0	19.5	5.0
28	13.5	4.5	8.5	3.0	7.5	3.0	3.0	1.0	12.0	2.0	19.0	5.5
29	12.0	5.5	5.5	2.0	7.5	4.5	8.5	1.5	---	---	20.0	4.0
30	11.0	6.5	7.5	2.0	8.0	4.0	8.5	1.5	---	---	17.5	6.0
31	8.0	4.5	---	---	6.0	1.5	6.5	1.5	---	---	19.0	7.0

09306175 BLACK SULPHUR CREEK NEAR RIO BLANCO, CO--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	11.0	7.5	13.0	6.0	18.0	7.5	21.5	11.0	20.0	12.0	17.0	10.0
2	15.5	6.5	---	---	18.0	7.5	22.0	9.0	22.0	10.5	16.5	10.0
3	13.5	6.0	---	---	17.0	8.5	23.0	9.0	23.0	11.5	18.0	10.0
4	16.0	4.5	18.0	4.0	18.0	9.5	19.5	9.5	22.5	10.5	16.5	10.0
5	16.0	6.0	14.0	6.0	19.5	9.0	20.5	8.0	22.5	9.5	18.5	10.0
6	17.0	6.0	12.5	5.5	20.0	8.0	19.0	9.0	21.0	10.5	18.0	10.5
7	18.5	5.0	14.5	4.5	18.5	8.5	21.0	9.0	22.0	11.5	17.5	11.0
8	20.0	7.5	15.0	5.5	20.5	8.5	20.5	8.5	22.5	9.5	16.0	10.5
9	10.0	5.0	22.5	4.0	20.0	8.5	21.0	9.0	20.5	10.5	17.0	10.0
10	16.5	2.5	19.0	5.5	19.0	9.5	21.0	10.0	19.5	10.5	16.0	10.0
11	20.0	4.0	14.5	7.5	19.5	9.0	21.0	11.0	18.0	10.0	16.0	11.0
12	19.0	5.0	17.0	7.5	20.0	8.0	21.5	10.0	19.5	11.0	15.5	9.0
13	15.0	6.0	17.5	7.5	20.5	8.0	21.5	8.5	16.5	11.0	16.5	8.0
14	17.0	6.5	17.5	8.0	19.5	8.0	22.5	9.0	14.5	10.0	13.5	8.5
15	17.5	6.5	17.0	8.0	19.5	8.0	19.0	9.5	18.5	8.5	16.5	9.5
16	15.5	4.0	16.0	8.5	19.0	8.5	19.5	10.5	18.0	9.0	16.5	9.5
17	11.0	3.5	12.0	8.5	19.0	9.0	20.5	11.5	18.0	9.5	17.0	11.0
18	18.0	2.0	14.0	7.5	19.5	9.0	20.5	10.5	18.0	9.5	13.0	9.5
19	18.5	2.0	17.0	7.5	19.5	8.5	20.5	11.0	17.5	8.5	11.5	8.0
20	18.5	3.0	18.0	8.0	17.0	8.5	21.5	11.0	17.5	9.5	13.0	7.5
21	11.5	3.5	13.0	10.0	18.5	10.0	20.0	10.5	17.0	10.0	15.0	6.5
22	16.5	2.5	17.0	8.5	20.5	9.0	22.0	9.0	15.5	11.0	15.5	7.0
23	18.5	3.5	16.5	8.5	20.0	8.0	23.0	9.0	17.5	10.5	16.5	8.0
24	20.5	4.0	16.5	7.5	20.5	8.0	22.5	9.0	17.0	9.5	15.0	8.5
25	13.5	6.5	16.0	8.0	21.0	8.5	22.0	13.0	16.5	10.0	16.5	9.0
26	17.0	5.5	16.5	7.5	21.0	9.0	23.0	10.5	17.5	9.5	16.5	8.5
27	14.0	6.5	16.0	8.5	21.5	10.0	23.0	10.0	17.0	9.0	16.0	8.5
28	16.5	6.0	17.0	8.5	22.5	8.5	19.0	11.0	17.5	9.0	15.5	8.5
29	16.0	6.5	18.5	7.5	22.0	9.5	19.0	11.5	18.5	9.0	16.0	9.0
30	15.5	7.0	18.5	8.5	20.5	10.5	22.5	11.0	18.0	8.5	16.0	8.0
31	---	---	17.5	8.0	---	---	19.5	10.5	16.0	10.0	---	---

09306175 BLACK SULPHUR CREEK NEAR RIO BLANCO, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	3.2	---	.30	3.8	---	.62	4.2	215	2.4
2	3.4	---	.37	3.6	---	.78	4.4	256	3.0
3	3.2	---	.38	3.6	---	.63	4.4	126	1.5
4	2.8	---	.38	3.6	45	.44	4.4	---	.90
5	2.8	50	.38	3.6	49	.48	4.6	---	1.5
6	3.0	28	.23	3.8	57	.58	4.4	---	1.1
7	3.2	41	.35	3.9	50	.51	4.4	100	1.2
8	3.0	28	.23	3.5	---	.36	4.4	210	2.5
9	3.0	14	.11	3.4	---	.66	4.0	230	2.5
10	3.0	8	.06	3.5	---	.81	4.2	285	3.2
11	3.2	13	.11	3.8	---	1.2	4.2	---	3.6
12	3.5	35	.33	3.8	133	1.4	4.0	---	3.2
13	3.6	18	.17	3.8	124	1.3	3.8	442	4.5
14	3.6	15	.15	3.8	119	1.2	4.0	540	5.8
15	3.6	21	.20	3.8	238	2.4	4.0	520	5.6
16	3.6	---	.20	3.6	208	2.0	3.8	418	4.3
17	3.6	18	.17	3.8	110	1.1	3.0	420	3.4
18	3.6	---	.15	3.8	105	1.1	4.0	340	3.7
19	3.6	15	.15	3.4	174	1.6	3.2	380	3.3
20	3.8	28	.29	3.0	---	1.3	2.2	400	2.4
21	3.8	40	.41	3.4	---	1.4	2.0	330	1.8
22	3.8	40	.41	4.2	144	1.6	2.9	408	3.2
23	3.8	---	.80	4.4	124	1.5	3.4	462	4.2
24	3.6	92	.89	4.4	35	.42	3.4	495	4.5
25	3.8	60	.62	4.6	91	1.1	3.0	---	3.4
26	4.6	55	.68	4.6	143	1.8	3.4	---	3.8
27	4.4	30	.36	4.6	128	1.6	3.5	---	3.5
28	4.4	45	.53	4.6	191	2.4	3.4	---	3.4
29	4.2	33	.37	4.2	287	3.3	3.4	---	3.3
30	4.0	30	.32	4.2	207	2.3	3.4	---	3.2
31	3.8	30	.31	---	---	---	3.4	---	3.4
TOTAL	110.5	---	10.41	116.0	---	37.89	114.8	---	97.30

09306175 BLACK SULPHUR CREEK NEAR RIO BLANCO, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JANUARY			FEBRUARY			MARCH	
1	2.4	---	2.4	2.8	308	2.3	4.2	---	6..
2	2.0	---	2.0	2.0	310	1.7	3.8	---	6.0
3	3.4	---	3.9	1.2	312	1.0	3.4	---	5.2
4	3.8	---	4.1	1.4	310	1.2	3.5	---	6.0
5	3.5	375	3.5	1.6	338	1.5	3.5	---	5.5
6	3.5	372	3.5	3.4	330	3.0	3.6	---	5.3
7	3.4	410	3.8	3.4	190	1.7	3.8	---	5.1
8	2.8	400	3.0	2.3	244	1.5	4.0	---	5.4
9	3.2	362	3.1	1.5	180	.73	4.0	---	5.2
10	3.2	380	3.3	2.6	175	1.2	4.8	518	6.7
11	3.2	410	3.5	4.8	295	3.8	4.8	467	6.1
12	2.8	422	3.2	4.6	408	5.1	4.6	331	4.1
13	3.0	258	2.1	5.2	600	8.4	4.4	260	3.3
14	3.0	325	2.6	4.2	460	5.2	4.6	247	3.1
15	3.0	338	2.7	4.0	450	4.9	4.4	600	7.1
16	3.0	330	2.7	4.0	470	5.1	4.0	640	6.9
17	3.0	391	3.2	3.5	---	4.4	4.8	---	6.2
18	2.4	290	2.2	3.2	---	4.2	4.6	---	5.8
19	2.7	---	1.8	3.6	---	4.8	4.8	---	7.0
20	2.8	---	1.9	4.0	---	4.3	4.6	360	4.5
21	2.8	---	2.0	3.8	410	4.2	4.2	321	3.6
22	2.7	---	1.9	3.6	478	4.6	3.2	326	2.8
23	2.7	---	1.8	4.0	---	5.3	3.4	334	3.1
24	2.0	---	1.5	4.2	925	10	5.4	290	4.2
25	3.0	---	3.1	4.6	1050	13	4.8	280	3.6
26	3.0	300	2.4	5.2	670	9.4	4.6	280	3.5
27	3.2	---	2.2	5.2	890	12	4.4	246	2.9
28	2.8	---	2.3	4.6	---	8.1	4.2	211	2.4
29	3.4	---	3.1	---	---	---	4.2	202	2.3
30	2.7	---	2.3	---	---	---	4.2	168	1.9
31	3.0	320	2.6	---	---	---	4.2	270	3.1
TOTAL	91.4	---	83.7	98.5	---	132.63	131.0	---	144.0

09306175 BLACK SULPHUR CREEK NEAR RIO BLANCO, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	4.6	291	3.6	2.2	79	.47	.90	76	.18
2	4.8	291	3.8	2.4	---	.49	1.0	77	.21
3	4.8	239	3.1	2.6	68	.48	1.0	86	.23
4	4.2	225	2.6	2.3	101	.63	1.4	99	.37
5	4.6	198	2.5	2.8	194	1.5	2.8	104	.79
6	4.2	---	2.2	3.5	180	1.7	1.4	48	.18
7	4.0	199	2.1	2.7	94	.69	1.1	42	.12
8	4.0	226	2.4	3.0	20	.16	1.1	24	.07
9	3.8	233	2.4	1.9	12	.06	1.0	25	.07
10	3.8	116	1.2	.75	22	.04	1.0	10	.03
11	3.5	151	1.4	.30	40	.03	1.0	8	.02
12	3.4	236	2.2	.20	---	.01	1.0	28	.08
13	3.4	182	1.7	.20	---	.01	.75	34	.07
14	3.4	---	1.3	.50	---	.01	.63	61	.10
15	3.2	111	.96	.75	17	.03	.63	68	.12
16	3.0	138	1.1	.90	47	.11	.50	47	.06
17	3.0	198	1.6	1.4	64	.24	.75	30	.06
18	3.2	208	1.8	1.5	47	.19	1.1	26	.08
19	2.7	101	.74	1.5	34	.14	1.4	28	.11
20	2.3	25	.16	1.2	38	.12	1.6	52	.22
21	2.3	31	.19	1.5	50	.20	1.9	138	.71
22	2.2	80	.48	1.4	25	.09	1.9	136	.70
23	2.3	---	.50	1.5	25	.10	2.0	148	.80
24	1.6	---	.35	1.6	52	.22	2.2	128	.76
25	1.6	---	.33	1.5	24	.10	2.0	89	.48
26	1.6	77	.33	1.4	15	.06	1.9	124	.64
27	1.9	84	.43	1.2	14	.05	1.5	137	.55
28	2.0	94	.51	1.4	10	.04	1.9	200	1.0
29	2.2	88	.52	1.6	14	.06	2.2	450	2.7
30	2.2	100	.59	1.6	62	.27	1.9	150	.77
31	---	---	---	1.1	66	.20	---	---	---
TOTAL	93.8	---	43.09	48.40	---	8.50	41.46	---	12.28

09306175 BLACK SULPHUR CREEK NEAR RIO BLANCO, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JULY			AUGUST			SEPTEMBER	
1	1.8	200	.97	3.0	8500	69	.50	19	.03
2	1.8	1400	6.8	2.8	13700	104	.51	25	.03
3	1.6	6100	26	2.6	9000	63	.48	71	.09
4	1.2	8220	27	2.4	10400	67	.50	69	.09
5	1.2	4050	13	2.2	19800	118	.47	43	.05
6	1.2	124	.40	2.2	19200	114	.51	24	.03
7	1.2	44	.14	1.4	13300	50	.40	46	.05
8	1.2	100	.32	.40	600	.65	.38	33	.03
9	1.2	164	.53	.75	68	.14	.34	36	.03
10	1.2	94	.30	.90	39	.09	.32	28	.02
11	1.3	50	.18	.90	51	.12	.27	28	.02
12	1.3	86	.30	1.0	107	.29	.26	80	.06
13	1.2	44	.14	.90	78	.19	.36	62	.06
14	1.2	90	.29	1.1	42	.12	.35	43	.04
15	1.1	68	.20	1.0	30	.08	.40	36	.04
16	1.0	126	.34	1.0	17	.05	.38	48	.05
17	1.0	43	.12	.90	---	.04	.45	34	.04
18	.90	41	.10	.91	---	.04	1.5	36	.15
19	.75	51	.10	1.1	22	.07	1.3	27	.09
20	.75	89	.18	1.0	38	.10	1.4	---	.09
21	.63	62	.11	1.1	40	.12	1.2	---	.08
22	1.2	850	2.8	1.2	34	.11	1.3	---	.09
23	1.9	4200	22	1.0	110	.30	1.3	33	.12
24	1.8	2550	12	.97	210	.55	1.3	51	.18
25	1.5	290	1.2	.99	380	1.0	1.3	30	.11
26	1.9	70	.36	1.0	115	.31	1.4	34	.13
27	1.8	185	.90	.99	210	.56	1.5	52	.21
28	1.4	85	.32	.77	62	.13	1.4	18	.07
29	1.2	30	.10	.80	49	.11	1.4	78	.29
30	1.8	3000	15	1.0	58	.16	1.4	80	.30
31	2.7	5500	40	.82	110	.24	---	---	---
TOTAL	41.93	---	172.20	39.10	---	590.57	24.58	---	2.67
YEAR	951.07		1335.24						

09306200 PICEANCE CREEK BELOW RYAN GULCH, NEAR RIO BLANCO, CO

LOCATION.--Lat 39°55'16", long 108°17'49", in sec.32, T.1 S., R.97 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank at downstream side of bridge, 40 ft (12 m) downstream from Ryan Gulch, and 23 mi (37 km) northwest of Rio Blanco.

DRAINAGE AREA.--485 mi^2 (1,256 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1964 to current year.

REVISED RECORDS.--WRD Colo. 1973: 1972(M).

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,070 ft (1,850 m), from topographic map.

REMARKS.--Records good except those for winter period, which are fair. Diversions for irrigation above station.

AVERAGE DISCHARGE.--14 years, 18.6 ft^3/s (0.527 m^3/s), 13,480 acre-ft/yr (16.6 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 400 ft^3/s (11 m^3/s), estimated, Mar. 9, 1966, gage height, 6.23 ft (1.899 m); minimum daily, 0.21 ft^3/s (0.006 m^3/s) May 21, 1972.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 85 ft^3/s (2.41 m^3/s) at 1700 June 6, gage height, 4.09 ft (1.247 m), no peak above base of 100 ft^3/s (2.8 m^3/s); minimum daily, 2.0 ft^3/s (0.057 m^3/s) July 17, Sept. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.3	10	20	15	18	22	69	20	12	12	9.9	7.2
2	8.0	10	21	13	17	23	71	26	12	9.2	12	5.0
3	7.5	10	21	13	16	22	63	22	10	9.2	10	2.0
4	6.2	11	21	14	16	22	51	28	10	8.3	7.7	2.9
5	6.4	11	20	15	16	22	56	31	12	8.0	7.7	3.1
6	6.7	12	22	16	16	24	50	31	36	7.5	7.5	3.9
7	7.2	12	21	16	17	27	49	29	22	6.4	8.9	4.8
8	7.0	11	20	16	17	26	49	30	10	5.9	7.5	5.9
9	7.0	11	22	17	17	27	50	28	9.9	5.4	7.2	8.9
10	6.7	11	21	16	17	27	50	27	8.9	5.2	8.0	9.2
11	6.7	11	20	17	17	26	48	22	8.0	5.0	8.0	9.6
12	7.2	11	21	16	16	26	42	22	7.5	5.2	7.7	12
13	7.0	12	20	17	17	26	44	18	6.7	5.7	7.0	12
14	6.7	13	20	17	17	24	42	12	5.9	4.8	7.0	12
15	7.0	12	20	17	16	25	40	16	5.7	2.1	7.7	12
16	7.2	10	18	16	17	24	39	15	5.7	2.1	7.7	11
17	7.2	12	18	16	16	25	39	16	5.4	2.0	7.5	12
18	7.2	14	18	16	16	27	40	19	5.0	3.9	7.2	13
19	7.2	15	17	16	19	27	38	18	5.2	5.0	6.7	12
20	7.7	15	17	16	19	30	33	16	6.4	3.9	6.7	9.2
21	8.6	16	16	16	18	28	31	15	6.4	3.3	6.2	9.6
22	8.9	16	16	16	18	30	30	20	6.2	3.9	6.2	11
23	9.2	1:	17	16	18	30	29	17	7.0	5.2	7.2	11
24	9.2	18	17	3	15	31	23	16	6.7	5.4	7.5	11
25	9.2	20	18	19	20	30	18	15	7.2	5.2	8.0	11
26	9.6	18	16	19	22	28	12	13	7.5	4.6	8.3	12
27	9.2	17	17	16	24	26	12	12	9.6	4.6	7.5	12
28	9.2	16	15	15	22	25	13	12	10	4.6	7.7	12
29	9.9	17	15	20	---	30	14	14	9.2	5.7	7.5	12
30	10	19	15	16	---	39	18	14	10	7.2	8.0	11
31	10	---	15	16	---	53	---	13	---	10	8.0	---
TOTAL	245.1	408	575	497	498	852	1163	607	284.1	176.5	241.7	280.3
MEAN	7.91	13.6	18.5	16.0	17.8	27.5	38.8	19.6	9.47	5.69	7.80	9.34
MAX	10	20	22	20	24	53	71	31	36	12	12	13
MIN	6.2	10	15	13	16	22	12	12	5.0	2.0	6.2	2.0
AC-FT	486	809	1140	986	988	1690	2310	1200	564	350	479	556

CAL YR 1977 TOTAL 4362.2 MEAN 12.0 MAX 43 MIN 2.0 AC-FT 8650
WTR YR 1978 TOTAL 5827.7 MEAN 16.0 MAX 71 MIN 2.0 AC-FT 11560

09306200 PICEANCE CREEK BELOW RYAN GULCH, NEAR RIO BLANCO, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1970 to current year.

PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT DISCHARGE: October 1972 to current year.

INSTRUMENTATION.--Automatic pumping sediment sampler since October 1972.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SEDIMENT CONCENTRATIONS: Maximum daily, 21,700 mg/L July 20, 1977; minimum daily, 9 mg/L Sept. 17, 26, 1978.
SEDIMENT LOADS: Maximum daily, 4,160 tons (3,770 t) July 20, 1977; minimum daily, 0.19 ton (0.17 t) May 10, 1977.

EXTREMES FOR CURRENT YEAR.--
SEDIMENT CONCENTRATIONS: Maximum daily, 8,100 mg/L Apr. 1; minimum daily, 9 mg/L Sept. 17, 26.
SEDIMENT LOADS: Maximum daily, 1,510 tons (1,370 t) Apr. 1; minimum daily, 0.24 ton (0.22 t), estimated July 15-17, Sept. 3.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) (00095)	PH (UNITS) (00400)	TEMPER-ATURE (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS, NONCAR-BONATE (MG/L CACO3) (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)
OCT											
18...	1445	7.6	1750	8.9	12.0	8.4	680	180	88	110	200
NOV											
28...	1300	15	1550	8.8	5.0	11.6	610	87	90	93	200
DEC											
29...	1405	15	1510	8.2	5.0	11.2	570	94	88	84	170
JAN											
18...	1300	16	1400	8.6	5.0	11.9	560	97	85	83	160
FEB											
14...	1245	16	1500	8.1	1.5	12.3	580	90	88	87	170
MAR											
23...	0940	29	1450	7.8	6.0	12.0	580	80	86	88	160
APR											
19...	1320	34	1150	8.4	10.5	12.2	440	32	78	58	120
MAY											
22...	1410	23	1700	7.7	20.0	12.2	570	0	81	89	210
JUN											
15...	1445	9.5	1600	7.1	21.5	9.4	680	15	89	110	270
JUL											
25...	1215	5.5	1800	8.2	20.0	11.0	610	35	81	98	260
AUG											
14...	1330	12	1700	7.9	14.0	9.8	610	18	79	99	250
SEP											
26...	1320	12	2000	8.2	13.0	--	600	18	84	94	250

09306200 PICEANCE CREEK BELOW RYAN GULCH, NEAR RIO BLANCO, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE (MG/L AS HCO3) (00440)	CAR-BONATE (MG/L AS CO3) (00445)	ALKA-LINITY (MG/L AS CACO3) (00410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)
OCT											
18...	3.4	3.0	610	1	500	510	32	.7	17	1270	.03
NOV											
28...	3.5	3.3	640	0	530	430	17	.7	18	1170	.38
DEC											
29...	3.1	2.7	580	0	480	430	13	.8	18	1100	.43
JAN											
18...	3.0	2.5	560	1	460	360	13	.8	17	1000	.38
FEB											
14...	3.1	2.6	600	0	490	370	16	.8	17	1050	.34
MAR											
23...	2.9	3.1	610	0	500	350	15	.7	14	1020	.56
APR											
19...	2.5	3.3	490	1	400	230	15	.6	15	769	.97
MAY											
22...	3.8	5.6	710	0	580	400	22	.8	19	1180	.27
JUN											
15...	4.5	4.6	810	0	660	500	23	.9	16	1420	.00
JUL											
25...	4.6	3.7	700	0	570	460	25	1.0	18	1300	.11
AUG											
14...	4.4	3.8	720	0	590	490	24	.9	17	1320	.01
SEP											
26...	4.5	3.6	710	0	580	490	20	.8	17	1310	.00

DATE	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)
OCT											
18...	.00	.03	.02	--	.44	--	.00	2	100	230	0
NOV											
28...	.00	.39	.06	--	.55	--	.02	4	0	210	1
DEC											
29...	.00	.43	.09	--	.56	--	.01	2	100	190	1
JAN											
18...	.01	.40	.08	--	.70	--	.02	4	0	180	0
FEB											
14...	.01	.34	.06	--	--	--	.02	2	300	170	1
MAR											
23...	.04	.61	.09	.74	--	.83	.01	3	200	180	0
APR											
19...	.02	.98	.05	--	1.1	--	.04	4	0	170	1
MAY											
22...	.01	.27	.00	--	--	--	.06	3	200	270	2
JUN											
15...	.01	.01	.00	--	1.9	--	.00	5	200	320	0
JUL											
25...	.02	.13	.00	--	.35	--	.01	6	200	300	1
AUG											
14...	.00	.01	.00	--	.51	--	.01	3	100	300	<1
SEP											
26...	.01	.01	.01	--	1.1	--	.03	4	0	300	1

09306200 PICEANCE CREEK BELOW RYAN GULCH, NEAR RIO BLANCO, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
OCT 18...	1	80	3	10	100	.0	--	0	4000	--	0
NOV 28...	3	30	2	20	100	.0	--	1	3500	--	10
DEC 29...	0	20	3	20	70	.0	5	1	3300	5.0	10
JAN 18...	3	30	0	10	60	.0	--	1	3400	--	10
FEB 14...	0	40	9	10	60	.0	--	1	3300	--	10
MAR 23...	4	110	2	20	90	.0	7	3	2900	4.0	30
APR 19...	13	40	5	20	10	.0	--	1	1900	--	10
MAY 22...	7	10	8	10	50	.0	--	0	2800	--	20
JUN 15...	0	30	3	10	170	.0	12	1	3400	2.0	10
JUL 25...	3	50	6	10	40	.0	--	1	3200	--	20
AUG 14...	1	10	9	10	20	.0	--	1	3500	--	10
SEP 26...	2	20	4	20	50	.0	7	1	3300	2.5	10

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	8.3	---	1.4	10	---	2.0	20	---	23
2	8.0	92	2.0	10	51	1.4	21	---	27
3	7.5	165	3.3	10	---	1.4	21	---	27
4	6.2	115	1.9	11	---	3.5	21	---	27
5	6.4	---	1.3	11	133	4.0	20	382	21
6	6.7	---	1.1	12	160	5.2	22	---	31
7	7.2	---	1.2	12	150	4.9	21	---	27
8	7.0	---	1.2	11	135	4.0	20	---	23
9	7.0	---	1.2	11	147	4.4	22	---	31
10	6.7	---	1.1	11	96	2.9	21	---	27
11	6.7	---	1.1	11	39	1.2	20	---	23
12	7.2	---	1.2	11	68	2.0	21	---	27
13	7.0	---	1.2	12	38	1.2	20	401	26
14	6.7	65	1.2	13	60	2.1	20	---	25
15	7.0	60	1.1	12	68	2.2	20	---	23
16	7.2	80	1.6	10	120	3.2	18	---	16
17	7.2	40	.78	12	142	4.6	18	---	15
18	7.2	35	.68	14	270	10	18	---	14
19	7.2	45	.87	15	---	10	17	---	11
20	7.7	66	1.4	15	---	10	17	---	11
21	8.6	77	1.8	16	---	11	16	---	7.7
22	8.9	---	2.1	16	---	11	16	169	7.3
23	9.2	80	2.0	17	---	14	17	---	9.2
24	9.2	54	1.3	18	---	17	17	---	9.2
25	9.2	---	1.2	20	---	23	18	---	11
26	9.6	66	1.7	18	---	17	16	---	7.5
27	9.2	81	2.0	17	---	14	17	---	9.5
28	9.2	62	1.5	16	202	8.7	15	---	6.9
29	9.9	---	3.7	17	---	14	15	170	6.9
30	10	---	2.8	19	---	17	15	---	7.0
31	10	98	2.6	---	---	---	15	---	7.8
TOTAL	245.1	---	49.53	408	---	226.9	575	---	544.2

09306200 PICEANCE CREEK BELOW RYAN GULCH, NEAR RIO BLANCO, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JANUARY			FEBRUARY			MARCH	
1	15	---	10	18	---	12	22	442	26
2	13	---	10	17	---	10	23	314	19
3	13	---	8.5	16	206	8.9	22	352	21
4	14	233	8.8	16	---	9.0	22	---	23
5	15	---	9.0	16	---	9.0	22	---	23
6	16	216	9.3	16	---	9.0	24	---	31
7	16	274	12	17	---	13	27	---	37
8	16	256	11	17	---	13	26	---	31
9	17	---	12	17	---	13	27	380	28
10	16	---	11	17	283	13	27	342	25
11	17	---	12	17	333	15	26	---	31
12	16	---	8.0	16	329	14	26	---	31
13	17	177	8.1	17	459	21	26	---	17
14	17	---	8.5	17	342	16	24	---	27
15	17	---	8.5	16	---	10	25	---	27
16	16	---	8.0	17	---	14	24	---	23
17	16	---	8.0	16	---	11	25	---	27
18	16	187	8.1	16	---	10	27	---	31
19	16	185	8.0	19	---	17	27	---	31
20	16	182	7.9	19	---	17	30	513	42
21	16	146	6.3	18	---	14	28	522	39
22	16	178	7.7	18	---	11	30	531	43
23	16	173	7.5	18	---	14	30	540	44
24	13	206	7.2	19	---	17	31	720	60
25	19	228	13	20	---	17	30	665	54
26	19	182	9.3	22	---	23	28	527	40
27	16	195	8.4	24	719	47	26	560	39
28	15	---	8.0	22	629	37	25	560	38
29	20	---	14	---	---	---	30	2000	162
30	16	---	9.0	---	---	---	39	4530	477
31	16	---	9.0	---	---	---	53	7310	1050
TOTAL	497	---	286.1	498	---	435.0	852	---	2597

09306200 PICEANCE CREEK BELOW RYAN GULCH, NEAR RIO BLANCO, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	69	8100	1510	20	595	32	12	---	3.5
2	71	5800	1110	26	589	41	12	---	3.5
3	63	4200	714	22	374	22	10	---	2.8
4	51	2680	369	28	599	45	10	---	2.8
5	56	3190	482	31	672	56	12	1000	32
6	50	2370	320	31	578	48	36	3690	359
7	49	2640	349	29	595	47	22	834	50
8	49	2640	349	30	552	45	10	160	4.3
9	50	3080	416	28	493	37	9.9	120	3.2
10	50	2200	297	27	480	35	8.9	90	2.2
11	48	1890	245	22	400	24	8.8	50	1.1
12	42	2260	256	22	306	18	7.5	25	.51
13	44	1900	226	18	293	14	6.7	25	.45
14	42	1850	210	12	268	8.7	5.9	20	.32
15	40	1950	211	16	234	10	5.7	65	1.0
16	39	2000	211	15	196	7.9	5.7	65	1.0
17	39	1900	200	16	119	5.1	5.4	70	1.0
18	40	1850	200	19	76	3.9	5.0	50	.68
19	38	1240	127	18	89	4.3	5.2	120	1.7
20	33	---	110	16	171	7.4	6.4	212	3.7
21	31	---	100	15	---	10	6.4	120	2.1
22	30	---	90	20	---	23	6.2	88	1.5
23	29	---	80	17	---	14	7.0	112	2.1
24	23	---	37	16	207	8.9	6.7	132	2.4
25	18	---	14	15	126	5.1	7.2	161	3.1
26	12	159	5.2	13	---	6.0	7.5	176	3.6
27	12	204	6.6	12	---	3.5	9.6	235	6.1
28	13	174	6.1	12	---	4.4	10	241	6.5
29	14	178	6.7	14	---	7.2	9.2	160	4.0
30	18	183	8.9	14	---	7.2	10	165	4.5
31	---	---	---	13	---	6.0	---	---	---
TOTAL	1163	---	8266.5	607	---	606.6	284.1	---	510.66

09306200 PICEANCE CREEK BELOW RYAN GULCH, NEAR RIO BLANCO, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JULY			AUGUST			SEPTEMBER	
1	12	246	8.0	9.9	70	1.9	7.2	50	.97
2	9.2	150	3.7	12	70	2.3	5.0	46	.62
3	9.2	150	3.7	10	72	1.9	2.0	---	.24
4	8.3	126	2.8	7.7	94	2.0	2.9	---	.33
5	8.0	90	1.9	7.7	---	1.6	3.1	---	.34
6	7.5	126	2.6	7.5	---	1.4	3.9	---	.43
7	6.4	76	1.3	8.9	41	.99	4.8	---	.60
8	5.9	95	1.5	7.5	58	1.2	5.9	---	.85
9	5.4	120	1.7	7.2	94	1.8	8.9	---	2.1
10	5.2	157	2.2	8.0	62	1.3	9.2	---	2.4
11	5.0	112	1.5	8.0	53	1.1	9.6	---	2.8
12	5.2	87	1.2	7.7	41	.85	12	30	.97
13	5.7	98	1.5	7.0	29	.55	12	26	.84
14	4.8	65	.84	7.0	29	.55	12	26	.84
15	2.1	---	.24	7.7	35	.73	12	18	.58
16	2.1	---	.24	7.7	29	.60	11	17	.50
17	2.0	---	.24	7.5	25	.51	12	9	.29
18	3.9	73	.77	7.2	39	.76	13	12	.42
19	5.0	86	1.2	6.7	35	.63	12	18	.58
20	3.9	65	.68	6.7	25	.45	9.2	22	.55
21	3.3	34	.30	6.2	17	.28	9.6	22	.57
22	3.9	52	.55	6.2	24	.40	11	---	3.5
23	5.2	75	1.1	7.2	63	1.2	11	---	3.5
24	5.4	88	1.3	7.5	58	1.2	11	---	3.5
25	5.2	55	.77	8.0	60	1.3	11	14	.42
26	4.6	52	.65	8.3	56	1.3	12	9	.29
27	4.6	65	.81	7.5	63	1.3	12	20	.65
28	4.6	82	1.0	7.7	48	1.0	12	---	4.4
29	5.7	70	1.1	7.5	51	1.0	12	---	4.4
30	7.2	50	.97	8.0	56	1.2	11	---	1.1
31	10	53	1.4	8.0	56	1.2	---	---	---
TOTAL	176.5	---	47.76	241.7	---	34.50	280.3	---	39.58
YEAR	5827.7		13645.23						

09306202 HORSE DRAW NEAR RANGELY, CO

LOCATION.--Lat 39°55'59", long 108°18'59", in NE¼SE¼ sec.30., T.1 S., R.97 W., Rio Blanco County, Hydrologic Unit 14050007, on right bank 1.2 mi (1.9 km) upstream from mouth, 3.4 mi (5.5 km) southwest of Square S Ranch, and 28 mi (45 km) southeast of Rangely.

DRAINAGE AREA.--1.47 mi^2 (3.81 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1977 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,280 ft (1,914 m), from topographic map.

REMARKS.--Records excellent except those for Sept. 11, which are poor. No regulation or diversions.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11 ft^3/s (0.31 m^3/s) Sept. 11, gage height, 1.55 ft (0.472 m); no flow most days each year.

EXTREMES FOR CURRENT YEAR.--No flow for entire year.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1976 to current year.

INSTRUMENTATION.--Water-quality monitor since August 1977. Pumping sediment sampler since August 1977.

REMARKS.--No flow during 1978 water year.

WATER-QUALITY DATA, AUGUST 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)
SEP 11...	1300	8.0	180	6.0	94	0	33	2.7	7.6	.3	2.3	120

DATE	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)
SEP 11...	98	10	1.9	.1	11	132	.18	2.85	.90	.05	420	20

09306203 HORSE DRAW AT MOUTH, NEAR RANGELY, CO

LOCATION.--Lat 39°56'12", long 108°17'53", in SE¼NE¼ sec.29, T.1 S., R.97 W., Rio Blanco County, Hydrologic Unit 14050007, on left bank 1,500 ft (460 m) upstream from mouth, 2.5 mi (4.0 km) southwest of Square S Ranch, and 29 mi (47 km) southeast of Rangely.

DRAINAGE AREA.--2.87 mi² (7.43 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1977 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,110 ft (1,862 km), from topographic map.

REMARKS.--Records fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16 ft³/s (0.45 m³/s) July 24, 1977, gage height, 1.54 ft (0.469 m); no flow most of time.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8.2 ft³/s (0.232 m³/s) at 1000 Feb. 28, gage height, 1.27 ft (0.387 m); no flow most of year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.30	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.23	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.37	.00	.00	.00	.00	.00	.00
6	.10	.00	.00	.00	.00	.81	.00	.00	.00	.00	.00	.00
7	.04	.00	.00	.00	.00	1.0	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.25	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.29	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.17	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.13	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.04	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.61	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	00	.58	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	1.0	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	.14	.00	.00	.00	2.23	3.55	.00	.00	.00	.00	.00	.00
MEAN	.005	.000	.000	.000	.080	.11	.000	.000	.000	.000	.000	.000
MAX	.10	.00	.00	.00	1.0	1.0	.00	.00	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.3	.00	.00	.00	4.4	7.0	.00	.00	.00	.00	.00	.00

WTR YR 1978 TOTAL 5.92 MEAN .016 MAX 1.0 MIN .00 AC-FT 12

09306203 HORSE DRAW AT MOUTH, NEAR RANGELY, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1976 to current year.

INSTRUMENTATION.--Water quality monitor since October 1976. Pumping sediment sampler since October 1976.

REMARKS.--Flow occurred only on days shown.

WATER-QUALITY DATA, JULY 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)
JUL 24...	1500	E10	360	23.5	180	0	63	4.6	9.6	.3	4.1

DATE	BICAR-BONATE (MG/L AS HCO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
JUL 24...	220	180	4.8	4.9	32	238	.32	1.1	.07	550	740

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO
OCT 06...	1945	.75	589	8.2	4.5	270	81	78	28	.7

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)
OCT 06...	2.9	230	189	120	.3	17	389	.79	.60

DATE	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	BARIUM, DIS-SOLVED (UG/L AS BA)	BORON, DIS-SOLVED (UG/L AS B)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	IRON, DIS-SOLVED (UG/L AS FE)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	ZINC, DIS-SOLVED (UG/L AS ZN)
OCT 06...	.03	100	120	4	170	4	20	0	30

E ESTIMATED.

09306222 PICEANCE CREEK AT WHITE RIVER, CO

LOCATION.--Lat 40°05'16", long 108°14'35", in SW¼NE¼ sec.2, T.1 N., R.97 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 900 ft (270 m) upstream from mouth, 1.0 mi (1.6 km) west of White River City, and 17 mi (27 km) west of Meeker.

DRAINAGE AREA.--630 mi^2 (1,632 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1964 to September 1966, October 1970 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,705 ft (1,739 m), from topographic map. Oct. 1, 1964, to Sept. 30, 1966, and Oct. 1, 1970, to July 12, 1974, at several sites 1.1 mi (1.8 km) upstream at different datums.

REMARKS.--Records fair. Diversions for irrigation of about 5,500 acres (22.3 km^2) above station.

AVERAGE DISCHARGE.--10 years, 22.4 ft^3/s (0.634 m^3/s), 16,230 acre-ft/yr (20.0 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 628 ft^3/s (17.8 m^3/s) Sept. 7, 1978, gage height, 7.04 ft (2.146 m); minimum daily discharge, 0.50 ft^3/s (0.014 m^3/s) July 21, 22, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 625 ft^3/s (17.7 m^3/s) at 2000 Sept. 7, gage height, 7.04 ft (2.146 m), only peak above base of 100 ft^3/s (2.8 m^3/s); minimum daily, 2.0 ft^3/s (0.057 m^3/s) June 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	14	20	21	19	27	90	13	7.4	6.7	6.0	3.3
2	12	14	22	20	19	26	102	15	7.7	5.6	5.8	3.2
3	13	11	23	17	19	26	87	11	7.2	4.6	8.4	3.0
4	11	14	23	20	20	23	70	16	7.7	5.6	9.0	2.7
5	11	14	23	22	20	26	72	22	12	5.0	6.9	2.3
6	12	15	22	21	20	28	69	21	16	5.0	8.2	2.7
7	13	15	23	21	20	27	64	23	52	4.8	8.7	43
8	12	14	22	21	20	27	68	26	14	4.0	9.9	14
9	11	14	19	22	20	27	64	22	13	4.0	10	12
10	11	15	27	22	20	32	64	23	12	4.2	10	9.8
11	11	16	23	22	21	31	54	21	10	4.4	10	9.3
12	12	15	21	21	21	30	52	18	9.0	4.2	11	5.6
13	12	16	23	21	21	29	52	16	7.8	3.6	11	5.4
14	13	16	22	21	20	28	50	13	6.2	3.6	11	5.4
15	13	16	24	19	21	26	48	12	5.0	4.8	9.6	5.4
16	14	16	22	19	22	26	46	13	4.2	5.0	7.4	5.8
17	15	16	19	19	18	26	42	12	3.5	6.0	6.2	6.2
18	14	15	20	19	22	26	39	11	3.1	7.2	6.4	7.0
19	14	18	19	22	22	28	39	11	2.7	5.4	6.2	7.4
20	14	24	19	19	24	29	35	10	2.4	5.4	6.2	5.0
21	15	28	18	18	21	28	31	9.9	2.2	5.2	5.8	6.7
22	15	30	18	20	21	28	30	12	2.0	5.4	6.7	6.4
23	15	29	18	20	22	29	25	13	2.1	5.4	3.3	6.2
24	15	25	18	22	22	34	23	12	2.1	5.2	2.5	6.2
25	15	23	20	22	23	34	18	9.3	2.3	4.6	3.0	6.0
26	15	23	22	26	24	30	13	6.2	2.4	4.8	3.1	6.0
27	14	22	23	21	28	28	11	5.4	2.0	4.8	3.3	6.2
28	14	22	23	19	27	28	12	5.8	3.2	5.2	3.5	6.2
29	14	21	23	21	---	30	9.8	6.4	3.7	5.2	3.1	6.7
30	14	21	23	21	---	40	9.8	8.2	4.8	6.2	3.3	7.2
31	14	---	23	18	---	57	---	8.0	---	6.9	3.7	---
TOTAL	410	552	665	637	597	914	1389.6	425.2	229.7	158.0	209.2	222.3
MEAN	13.2	18.4	21.5	20.5	21.3	29.5	46.3	13.7	7.66	5.10	6.75	7.41
MAX	15	30	27	26	28	57	102	26	52	7.2	11	43
MIN	11	11	18	17	18	23	9.8	5.4	2.0	3.6	2.5	2.3
AC-FT	813	1090	1320	1260	1180	1810	2760	843	456	313	415	441

CAL YR 1977 TOTAL 4788.54 MEAN 13.1 MAX 30 MIN .74 AC-FT 9500
WTR YR 1978 TOTAL 6409.00 MEAN 17.6 MAX 102 MIN 2.0 AC-FT 12710

09306222 PICEANCE CREEK AT WHITE RIVER, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1970 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: January 1971 to June 1974, May 1975 to current year.
WATER TEMPERATURE: January 1971 to September 1974, May 1975 to current year.
SUSPENDED-SEDIMENT DISCHARGE: March 1974 to current year.

INSTRUMENTATION.--Water-quality monitor since May 1974. Pumping sediment sampler since March 1974.

REMARKS.--Daily water temperatures for 1977 water year revised.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 9,500 micromhos July 16, 1972; minimum daily, 628 micromhos Apr. 3, 1978.
WATER TEMPERATURES: Maximum, 32.0°C July 14, 1978; minimum, freezing point on many days during winter months.
SEDIMENT CONCENTRATIONS: Maximum daily, 25,000 mg/L, estimated Sept. 7, 1978; minimum daily, 4 mg/L Oct. 2, 1977.
SEDIMENT LOADS: Maximum daily, 2,900 tons (2,630 t), estimated Sept. 7, 1978; minimum daily, 0.10 ton (0.09 t) June 22, 1978.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 6,870 micromhos July 25; minimum, 628 micromhos Apr. 3.
WATER TEMPERATURES: Maximum, 32.0°C July 14; minimum, -0.5°C Nov. 10.
SEDIMENT CONCENTRATIONS: Maximum daily, 25,000 mg/L estimated Sept. 7; minimum daily, 4 mg/L Oct. 2.
SEDIMENT LOADS: Maximum daily, 2,900 tons (2,630 t), estimated Sept. 7; minimum daily, 0.10 ton (0.09 t) June 22.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NFSS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT									
18...	1300	14	2800	8.7	9.5	8.9	620	0	64
NOV									
22...	1215	36	1950	7.7	.5	--	570	0	73
DEC									
28...	1345	23	2000	8.1	.5	--	420	0	73
JAN									
18...	1050	20	1900	8.6	3.0	10.6	550	0	73
FEB									
14...	1100	20	2100	8.2	2.0	12.7	570	0	78
MAR									
27...	1030	29	2000	8.1	8.0	14.2	610	0	83
APR									
19...	1225	24	1500	8.2	9.5	10.3	440	0	70
MAY									
22...	1230	11	3600	7.4	18.0	11.2	600	0	58
JUN									
15...	1245	7.5	3800	7.5	22.0	12.6	570	0	44
JUL									
25...	1000	5.5	3750	8.8	18.0	--	490	0	36
AUG									
14...	0910	9.5	3000	8.3	15.0	9.8	500	0	44
SEP									
27...	1015	6.2	3300	8.4	9.0	8.8	510	0	48

09306222 PICEANCE CREEK AT WHITE RIVER, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)
OCT									
18...	110	410	7.2	3.9	1120	1	920	520	53
NOV									
22...	93	290	5.3	4.2	870	0	710	420	33
DEC									
28...	56	320	6.9	3.1	860	0	710	370	39
JAN									
18...	88	340	6.3	3.1	890	1	730	390	40
FEB									
14...	90	330	6.0	3.3	920	0	750	410	44
MAR									
27...	96	330	5.9	3.7	900	0	740	450	69
APR									
19...	63	220	4.6	3.6	680	0	560	270	33
MAY									
22...	110	630	11	6.4	1420	0	1160	740	75
JUN									
15...	110	970	18	6.7	2180	0	1790	800	160
JUL									
25...	97	960	19	5.2	1830	130	1720	590	130
AUG									
14...	94	520	10	4.0	1200	0	980	530	68
SEP									
27...	95	630	12	5.1	1290	96	1220	580	91

DATE	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	BORON, DISSOLVED (UG/L AS B)	IRON, DISSOLVED (UG/L AS FE)	LITHIUM DISSOLVED (UG/L AS LI)	MANGANESE, DISSOLVED (UG/L AS MN)
OCT									
18...	1.3	15	1730	.06	.00	390	250	40	70
NOV									
22...	1.0	17	1370	.46	.02	--	90	40	80
DEC									
28...	1.3	17	1310	.43	.04	290	50	30	40
JAN									
18...	1.2	17	1400	.43	.06	280	20	30	60
FEB									
14...	1.1	17	1430	.38	.06	270	20	30	50
MAR									
27...	1.0	14	1500	.38	.04	280	480	40	40
APR									
19...	.9	15	1020	.98	.05	240	20	30	20
MAY									
22...	1.5	16	2340	.28	.05	500	40	50	30
JUN									
15...	2.9	12	2980	.10	.01	790	60	90	30
JUL									
25...	3.5	10	2870	.03	.02	820	50	100	10
AUG									
14...	1.5	15	1870	.01	.06	480	80	40	10
SEP									
27...	1.6	12	2200	.02	.01	570	40	60	30

09306222 PICEANCE CREEK AT WHITE RIVER, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2400	2710	1840	1710	1900	1330	1370	2810	0	4090	3260	3400
2	2260	2520	1860	2080	1810	1430	1240	2440	3700	4000	3400	3410
3	2100	2460	1980	2050	1930	1470	966	2490	3920	4070	3090	3460
4	---	2410	1960	1740	2000	1570	760	2250	4100	3450	2780	3510
5	---	2400	1970	1760	2090	1680	892	1990	---	3330	3070	3510
6	---	2350	1970	1880	2190	1800	963	1290	3940	3320	2920	3790
7	---	2370	2050	1920	2250	1860	1050	1370	2160	3130	2910	2830
8	---	2390	1860	1980	2310	1910	1100	1930	2920	3490	2790	2420
9	---	2410	1930	1820	2230	1970	1150	2500	3040	3460	2790	3790
10	---	2400	1850	1860	1980	1890	1090	2470	2920	3350	2780	4030
11	---	2410	1920	1970	2080	1570	942	2460	2850	3330	2740	4010
12	---	2410	1970	2070	2150	1510	1130	2590	2830	3350	2820	3870
13	3000	2390	2030	1950	2110	1460	1270	2740	2890	3690	2930	3530
14	3000	2350	1990	1890	2030	1430	1440	2910	2980	4090	2790	3360
15	2800	2310	1980	1990	1710	1390	1370	3150	3250	3720	2690	3180
16	2800	2390	1910	1960	1550	1370	1220	3120	3820	3880	2840	3210
17	2600	2370	2200	1990	1560	1270	1430	3080	4020	4400	3030	3250
18	2200	2410	1770	1990	1630	1200	1510	3130	4060	3300	2990	3150
19	2520	2230	1750	2000	1510	1180	1490	3110	3780	3840	3030	3070
20	2490	2590	1840	1960	1430	1190	1710	3160	3980	3950	3090	3080
21	2810	2510	---	1950	1500	1150	1810	3180	4270	3870	3200	3180
22	2500	1960	---	1940	1570	1150	1790	3000	4340	3790	---	3240
23	2470	2020	---	1910	1610	1120	1920	2810	4710	3790	3020	3270
24	2500	2040	2040	1880	1650	1320	2220	3010	4960	3810	3530	3280
25	2500	2100	2010	1860	1700	1850	2490	3620	5030	3780	3460	3320
26	2550	2120	2030	1960	1740	1960	2800	3570	5180	3810	3370	3360
27	2560	2160	2000	1910	1730	1980	3000	4560	5020	3760	3330	3310
28	2620	2110	1980	2000	1330	1830	2920	4260	4840	3610	3260	3250
29	2650	2000	1820	1850	---	1820	3100	4020	4500	3590	3340	3190
30	2690	1880	1650	1840	---	1710	3340	3700	4060	3410	3470	3120
31	2720	---	1610	1860	---	1520	---	3680	---	3140	3440	---

09306222 PICEANCE CREEK AT WHITE RIVER, CO--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	14.0	3.5	7.0	.0	1.0	.0	.5	.5	2.5	.5	5.5	3.5
2	14.0	4.0	7.0	4.0	5.5	.5	.5	.5	3.5	.5	5.5	2.5
3	9.5	3.5	8.5	.5	6.5	4.0	.5	.0	3.5	.5	3.0	.5
4	---	---	9.5	1.5	6.0	3.5	.5	.5	4.5	.5	5.5	.5
5	---	---	6.5	3.0	5.0	1.0	.5	.5	2.5	.5	6.5	2.5
6	---	---	7.5	4.5	2.0	.5	.5	.0	5.0	1.5	9.0	3.5
7	---	---	10.0	4.5	2.5	.5	1.0	.5	7.5	1.5	11.5	4.5
8	---	---	6.0	.0	2.5	.5	.5	.5	6.5	2.0	10.0	2.0
9	---	---	1.5	.0	1.0	.0	.5	.5	3.5	.5	10.0	3.5
10	---	---	2.5	.0	1.5	.0	.5	.5	5.0	2.0	9.0	3.5
11	---	---	4.0	.0	3.5	.5	.5	.5	5.0	2.0	9.0	4.5
12	---	---	6.5	.0	4.0	1.0	1.0	.0	3.5	.5	8.0	5.0
13	---	---	5.5	.0	2.5	.5	1.0	.5	4.5	.5	8.5	4.5
14	---	---	6.0	.0	5.0	.5	1.5	.5	5.5	.5	7.0	3.0
15	---	---	6.5	2.0	6.0	2.5	3.0	1.0	4.5	.5	7.5	.5
16	---	---	7.0	.5	3.0	.5	4.0	.5	5.0	.5	10.0	.5
17	---	---	6.0	.5	1.0	.5	4.0	1.5	3.5	.5	13.0	1.5
18	---	---	7.0	4.0	1.0	.5	4.5	1.5	1.5	.5	13.5	3.0
19	12.5	4.0	4.5	.5	1.0	.0	3.0	.5	2.0	.5	11.0	4.5
20	13.0	5.0	2.5	.5	.5	.5	3.5	1.0	3.0	.5	15.0	5.0
21	12.0	8.0	.5	.5	1.0	.0	4.5	1.5	7.5	.5	15.5	5.0
22	12.5	7.0	.5	.5	1.0	.0	4.0	.5	6.5	.5	9.5	6.5
23	12.5	4.0	1.0	.5	1.0	.0	2.5	.5	6.5	.5	9.5	5.0
24	11.5	4.0	1.0	.5	.5	.5	.5	.5	7.5	.5	10.0	5.0
25	12.5	3.5	6.0	.5	.5	.0	.5	.5	8.0	2.5	13.0	4.0
26	13.5	3.5	7.0	2.5	.5	.5	3.5	.5	7.0	3.5	15.5	4.5
27	12.5	3.5	3.5	1.5	.5	.5	3.0	.5	6.5	3.5	16.0	6.0
28	11.5	4.0	5.0	2.5	1.0	.5	1.0	.5	8.5	2.0	17.0	6.0
29	10.0	4.5	2.5	.5	.5	.5	1.5	.5	---	---	16.5	5.5
30	12.0	7.0	3.0	.5	1.0	.5	2.0	.5	---	---	15.5	6.0
31	7.5	2.5	---	---	1.0	.5	1.0	.5	---	---	15.0	7.5

09306222 PICEANCE CREEK AT WHITE RIVER, CO--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	10.0	6.5	16.5	6.5	24.5	4.0	28.5	12.5	27.0	16.5	23.5	12.0
2	10.0	5.5	20.5	7.0	23.0	7.5	27.5	10.5	28.0	15.0	23.0	12.5
3	9.5	6.0	16.5	9.0	21.5	8.5	26.0	9.0	28.0	16.0	24.5	13.0
4	11.5	5.5	14.5	6.5	23.5	10.0	25.5	9.5	27.5	14.0	24.5	13.5
5	11.5	6.0	14.5	6.0	---	---	26.5	9.0	28.0	12.0	26.0	13.5
6	13.5	7.0	12.5	6.0	25.0	17.5	26.5	12.5	25.0	13.5	26.5	14.0
7	15.0	7.0	10.5	5.0	20.0	13.5	28.5	12.0	28.5	15.0	27.5	12.0
8	15.5	8.5	15.5	6.5	25.5	10.0	29.0	11.0	28.0	14.5	21.5	12.0
9	11.0	6.5	19.5	5.0	25.0	10.5	26.5	12.0	28.0	16.5	22.0	12.5
10	12.0	4.0	18.5	7.5	23.0	12.5	25.0	13.5	27.0	16.0	21.5	13.5
11	15.0	6.0	13.0	8.5	26.0	11.5	25.5	15.5	24.0	15.0	20.5	13.5
12	16.0	7.0	20.0	7.0	25.5	9.0	30.5	14.5	23.0	17.0	20.0	10.0
13	11.5	7.5	22.5	7.0	24.5	9.5	30.0	11.5	22.5	17.5	19.0	8.0
14	14.5	7.5	23.0	8.0	23.5	9.0	32.0	12.0	19.5	14.5	15.5	8.0
15	13.0	8.0	23.0	8.0	26.0	9.5	23.0	14.0	23.0	9.5	19.5	10.5
16	12.5	6.5	21.5	8.5	26.0	9.0	27.0	14.0	23.0	11.0	20.5	10.5
17	8.5	5.0	16.0	6.5	28.0	10.0	27.0	17.0	22.5	12.0	19.5	13.5
18	13.5	1.0	17.5	4.0	25.0	8.5	25.0	14.5	22.5	10.5	15.0	9.5
19	14.5	4.0	20.5	3.5	27.0	11.5	26.5	16.0	22.5	9.5	12.0	7.0
20	15.5	5.0	21.5	4.0	28.5	9.5	29.0	16.5	22.0	11.5	12.0	7.5
21	9.0	5.0	19.5	8.5	29.5	11.0	20.0	16.0	22.5	13.5	16.0	5.0
22	13.0	2.0	21.0	5.5	29.0	12.0	30.0	14.0	21.5	16.5	17.5	6.5
23	16.0	4.0	19.5	9.5	29.0	11.5	29.0	13.0	25.5	14.5	19.0	8.0
24	19.0	5.5	21.0	7.5	29.0	14.5	29.5	12.0	24.5	12.0	17.5	7.5
25	16.0	8.0	21.5	7.0	27.5	13.0	30.0	14.0	24.0	13.5	20.0	10.5
26	17.0	6.0	23.0	5.5	29.0	10.5	31.0	15.0	25.5	13.0	19.5	9.0
27	12.0	7.0	23.0	5.5	25.0	10.5	31.0	14.0	23.5	11.5	18.5	9.0
28	16.5	6.0	25.0	8.0	23.5	13.0	26.0	17.0	24.0	12.0	18.5	9.0
29	17.0	7.0	24.5	7.5	22.0	13.0	30.5	18.0	24.0	11.5	19.0	9.5
30	15.5	7.0	24.5	9.5	25.5	12.5	31.0	17.0	24.0	11.5	17.5	7.5
31	---	---	24.0	8.0	---	---	24.5	15.0	22.5	14.5	---	---

09306222 PICEANCE CREEK AT WHITE RIVER, CO--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	12	7	.23	14	---	1.5	20	---	7.5
2	12	4	.13	14	31	1.2	22	---	12
3	13	7	.25	11	23	.68	23	---	15
4	11	12	.36	14	28	1.1	23	---	15
5	11	5	.15	14	17	.64	23	247	15
6	12	12	.39	15	26	1.1	22	299	18
7	13	60	2.1	15	30	1.2	23	322	20
8	12	65	2.1	14	15	.57	22	364	22
9	11	50	1.5	14	70	2.6	19	292	15
10	11	---	1.3	15	120	4.9	27	540	39
11	11	---	1.4	16	122	5.3	23	380	24
12	12	---	2.0	15	52	2.1	21	287	16
13	12	---	2.8	16	60	2.6	23	342	21
14	13	78	2.7	16	62	2.7	22	380	23
15	13	20	.70	16	60	2.6	24	366	24
16	14	47	1.8	16	42	1.8	22	378	22
17	15	110	4.5	16	44	1.9	19	315	16
18	14	78	2.9	15	44	1.8	20	341	18
19	14	44	1.7	18	96	4.7	19	322	17
20	14	78	2.9	24	84	5.4	19	192	9.8
21	15	54	2.2	28	87	6.6	18	91	4.4
22	15	79	3.2	30	148	12	18	124	6.0
23	15	60	2.4	29	---	11	18	220	11
24	15	35	1.4	25	---	9.5	18	204	9.9
25	15	48	1.9	23	---	9.0	20	140	7.6
26	15	30	1.2	23	---	9.0	22	159	9.4
27	14	23	.87	22	---	8.5	23	117	7.3
28	14	35	1.3	22	---	8.5	23	168	10
29	14	40	1.5	21	---	8.0	23	176	11
30	14	---	1.5	21	---	8.0	23	200	17
31	14	---	1.5	---	---	---	23	232	14
TOTAL	410	---	50.88	552	---	136.49	665	---	476.9

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JANUARY			FEBRUARY			MARCH	
1	21	225	13	19	450	23	27	892	65
2	20	196	11	19	382	20	26	872	61
3	17	112	5.1	19	413	21	26	1330	93
4	20	130	7.0	20	440	24	23	1320	82
5	22	144	8.6	20	474	26	26	1170	82
6	21	157	8.9	20	475	26	28	1020	77
7	21	192	11	20	451	24	27	1090	79
8	21	195	11	20	451	24	27	990	72
9	22	252	15	20	432	23	27	1030	75
10	22	360	21	20	490	26	32	1080	86
11	22	425	25	21	548	31	31	730	61
12	21	370	21	21	575	33	30	645	52
13	21	562	32	21	560	32	29	672	53
14	21	635	36	20	452	24	28	766	58
15	19	525	27	21	470	27	26	786	55
16	19	478	25	22	523	31	26	770	54
17	19	423	22	18	484	24	26	978	69
18	19	398	20	22	460	27	26	1010	71
19	22	495	29	22	903	54	28	1030	78
20	19	463	24	24	1310	85	29	1460	114
21	18	423	21	21	856	49	28	1380	104
22	20	445	24	21	715	41	28	1500	113
23	20	397	21	22	776	46	29	1730	135
24	22	390	23	22	914	54	34	2500	229
25	22	410	24	23	960	60	34	1680	154
26	26	376	26	24	978	63	30	1330	108
27	21	459	26	28	1380	104	28	1280	97
28	19	310	16	27	1210	88	28	1180	89
29	21	408	23	---	---	---	30	2030	164
30	21	374	21	---	---	---	40	3540	382
31	18	380	18	---	---	---	57	6460	991
TOTAL	637	---	615.6	597	---	1110	914	---	4003

09306222 PICEANCE CREEK AT WHITE RIVER, CO--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	90	7300	1770	13	353	12	7.4	50	1.0
2	102	7600	2090	15	454	18	7.7	---	1.0
3	87	5630	1320	11	452	13	7.2	---	.95
4	70	4650	879	16	260	11	7.7	116	4.4
5	72	3220	626	22	568	34	12	900	29
6	69	3570	665	21	570	32	16	970	145
7	64	2380	411	23	536	33	52	2310	447
8	68	---	480	26	696	49	14	110	4.2
9	64	---	460	22	531	32	13	55	1.9
10	64	2910	503	23	500	31	12	27	.87
11	54	2400	350	21	328	19	10	43	1.2
12	52	2280	320	18	280	14	9.0	---	1.0
13	52	2550	358	16	219	9.5	7.8	---	.85
14	50	2460	332	13	147	5.2	6.2	---	.60
15	48	2520	327	12	134	4.3	5.0	34	.46
16	46	2720	338	13	100	3.5	4.2	43	.49
17	42	2590	294	12	112	3.6	3.5	37	.35
18	39	---	200	11	111	3.3	3.1	39	.33
19	39	1270	134	11	63	1.9	2.7	36	.26
20	35	---	100	10	100	2.7	2.4	37	.24
21	31	1070	90	9.9	62	1.7	2.2	21	.12
22	30	1080	87	12	79	2.6	2.0	18	.10
23	25	871	59	13	214	7.5	2.1	40	.23
24	23	670	42	12	145	4.7	2.1	65	.37
25	18	533	26	9.3	54	1.4	2.3	85	.53
26	13	244	8.6	6.2	24	.40	2.4	100	.65
27	11	292	8.7	5.4	36	.52	2.0	95	.51
28	12	294	9.5	5.8	24	.38	3.2	78	.67
29	9.8	233	6.2	6.4	60	1.0	3.7	76	.76
30	9.8	230	6.1	8.2	31	.69	4.8	96	1.2
31	---	---	---	8.0	84	1.8	---	---	---
TOTAL	1389.6	---	12300.1	425.2	---	354.69	229.7	---	646.24

09306222 PICEANCE CREEK AT WHITE RIVER, CO--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JULY			AUGUST			SEPTEMBER	
1	6.7	---	2.0	6.0	---	.40	3.3	32	.29
2	5.6	---	1.8	5.8	33	.52	3.2	32	.28
3	4.6	---	1.5	8.4	56	1.3	3.0	37	.30
4	5.6	---	1.8	9.0	---	1.0	2.7	34	.25
5	5.0	132	1.8	6.9	37	.69	2.3	30	.19
6	5.0	124	1.7	8.2	49	1.1	2.7	31	.23
7	4.8	94	1.2	8.7	36	.85	43	---	2900
8	4.0	---	.65	9.9	84	2.2	14	---	24
9	4.0	57	.62	10	55	1.5	12	---	14
10	4.2	99	1.1	10	31	.84	9.8	---	8.5
11	4.4	90	1.1	10	---	.50	9.3	---	6.5
12	4.2	---	.90	11	---	.80	5.6	---	2.8
13	3.6	75	.73	11	---	.60	5.4	---	2.2
14	3.6	76	.74	11	17	.50	5.4	119	1.7
15	4.8	---	.80	9.6	21	.54	5.4	106	1.5
16	5.0	70	.94	7.4	24	.48	5.8	98	1.5
17	6.0	136	2.2	6.2	---	.30	6.2	---	1.3
18	7.2	126	2.4	6.4	---	.40	7.0	60	1.1
19	5.4	58	.85	6.2	---	.30	7.4	61	1.2
20	5.4	50	.73	6.2	---	.30	5.0	93	1.3
21	5.2	42	.59	5.8	18	.28	6.7	148	2.7
22	5.4	47	.69	6.7	---	.90	6.4	---	2.4
23	5.4	50	.73	3.3	---	.40	6.2	79	1.3
24	5.2	50	.70	2.5	41	.28	6.2	45	.75
25	4.6	57	.71	3.0	34	.28	6.0	34	.55
26	4.8	78	1.0	3.1	29	.24	6.0	36	.58
27	4.8	54	.70	3.3	29	.26	6.2	68	1.1
28	5.2	44	.62	3.5	38	.36	6.2	83	1.4
29	5.2	38	.53	3.1	37	.31	6.7	92	1.7
30	6.2	48	.80	3.3	40	.36	7.2	83	1.6
31	6.9	48	.89	3.7	38	.38	---	---	---
TOTAL	158.0	---	33.52	209.2	---	19.17	222.3	---	2983.22
YEAR	6409.0		22729.81						

09306235 CORRAL GULCH BELOW WATER GULCH, NEAR RANGELY, CO

LOCATION.--Lat 39°54'22", long 108°31'56", in SE¼NW¼ sec.5, T.2 S., R.99 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 0.1 mi (0.2 km) downstream from Water Gulch and 19 mi (31 km) southeast of Rangely.

DRAINAGE AREA.--8.61 mi² (22.30 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1974 to current year.

GAGE.--Water-stage recorder. Concrete control since Aug. 1, 1974. Prior to Aug. 1, 1974, water-stage recorder at different datum. Altitude of gage is 6,975 ft (2,126 m), from topographic map.

REMARKS.--Records good. No diversion above gage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 272 ft³/s (7.70 m³/s) July 23, 1977, gage height, 3.20 ft (0.975 m); no flow many days most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1.7 ft³/s (0.048 m³/s) at 1400 June 5, gage height, 1.48 ft (0.451 m); no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.06	.48	.22	.53	.49
2	.00	.00	.00	.00	.00	.00	.00	.04	.48	.08	.56	.46
3	.00	.00	.00	.00	.00	.00	.00	.08	.48	.16	.56	.37
4	.00	.00	.00	.00	.00	.00	.00	.16	.48	.20	.60	.15
5	.17	.00	.00	.00	.00	.00	.00	.20	.56	.20	.56	.06
6	.00	.00	.00	.00	.00	.00	.00	.12	.48	.16	.56	.04
7	.00	.00	.00	.00	.00	.00	.00	.13	.44	.10	.51	.15
8	.00	.00	.00	.00	.00	.00	.00	.00	.53	.12	.54	.23
9	.00	.00	.00	.00	.00	.00	.00	.06	.50	.02	.54	.28
10	.00	.00	.00	.00	.00	.00	.00	.07	.50	.00	.57	.37
11	.00	.00	.00	.00	.00	.00	.00	.09	.47	.00	.58	.37
12	.00	.00	.00	.00	.00	.00	.00	.07	.47	.03	.56	.37
13	.00	.00	.00	.00	.00	.00	.00	.12	.47	.16	.59	.35
14	.00	.00	.00	.00	.00	.00	.00	.11	.44	.08	.60	.30
15	.00	.00	.00	.00	.00	.00	.00	.16	.41	.10	.59	.28
16	.00	.00	.00	.00	.00	.00	.00	.26	.38	.08	.58	.28
17	.00	.00	.00	.00	.00	.00	.00	.32	.35	.23	.56	.28
18	.00	.00	.00	.00	.00	.00	.00	.38	.35	.41	.57	.30
19	.00	.00	.00	.00	.00	.00	.00	.38	.35	.47	.56	.30
20	.00	.00	.00	.00	.00	.01	.00	.44	.32	.47	.57	.30
21	.00	.00	.00	.00	.00	.03	.01	.47	.32	.44	.57	.30
22	.00	.00	.00	.00	.00	.01	.01	.35	.30	.50	.53	.30
23	.00	.00	.00	.00	.00	.03	.00	.32	.28	.50	.51	.28
24	.00	.00	.00	.00	.00	.00	.00	.35	.28	.50	.50	.28
25	.00	.00	.00	.00	.00	.00	.00	.53	.28	.50	.51	.28
26	.00	.00	.00	.00	.00	.00	.00	.53	.28	.50	.52	.28
27	.00	.00	.00	.00	.00	.00	.02	.53	.28	.50	.53	.28
28	.00	.00	.00	.00	.00	.00	.01	.47	.28	.50	.55	.28
29	.00	.00	.00	.00	---	.00	.04	.50	.28	.53	.56	.30
30	.00	.00	.00	.00	---	.02	.04	.50	.22	.50	.52	.28
31	.00	---	.00	.00	---	.00	---	.50	---	.50	.52	---
TOTAL	.17	.00	.00	.00	.00	.10	.13	8.30	11.74	8.76	17.11	8.59
MEAN	.005	.000	.000	.000	.000	.003	.004	.27	.39	.28	.55	.29
MAX	.17	.00	.00	.00	.00	.03	.04	.53	.56	.53	.60	.49
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.22	.00	.50	.04
AC-FT	.3	.00	.00	.00	.00	.2	.3	16	23	17	34	17

CAL YR 1977 TOTAL 14.95 MEAN .041 MAX 11 MIN .00 AC-FT 30
WTR YR 1978 TOTAL 54.90 MEAN .15 MAX .60 MIN .00 AC-FT 109

09306235 CORRAL GULCH BELOW WATER GULCH, NEAR RANGELY, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--March 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1974 to current year.
WATER TEMPERATURE: April 1974 to current year.
SUSPENDED-SEDIMENT DISCHARGE: October 1974 to current year.

INSTRUMENTATION.--Water-quality monitor since April 1974. Pumping sediment sampler since October 1974.

REMARKS.--Daily water temperatures for 1977 water year revised.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum,1,410 micromhos Nov. 3, 1976; minimum, not determined.
WATER TEMPERATURES: Maximum, 31.0°C July 13, 1978; minimum, freezing point many days during winter months each year.
SEDIMENT CONCENTRATIONS: Maximum daily, 16,000 mg/L, estimated Apr. 1, 1976; no flow many days during each year.
SEDIMENT LOADS: Maximum daily, 16 tons, estimated (15 t) Apr. 1, 1976; no flow many days during each year.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 1,280 micromhos July 15; minimum, 120 micromhos Oct. 6.
WATER TEMPERATURES: Maximum, 31.0°C July 13; minimum, not determined.
SEDIMENT CONCENTRATIONS: Maximum daily, 6,530 mg/L, May 2; no flow many days during year.
SEDIMENT LOADS: Maximum daily, 4.5 tons, estimated (4.1 t) estimated June 5; no flow many days during year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)
MAR 21...	1500	.21	260	8.1	2.5	--	--	--	--	--
MAY 24...	1515	.28	1100	7.7	21.5	5	8.6	170	--	--
JUN 15...	1015	.41	1025	7.3	18.0	--	8.2	--	--	--
SEP 26...	1520	.26	1100	8.2	20.0	4	7.3	130	1.4	3200

DATE	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI FECAL, (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)
MAR 21...	--	--	140	27	32	15	22	.8	2.3	140
MAY 24...	K38	K30	500	140	99	60	85	1.7	2.2	430
JUN 15...	--	--	470	150	90	59	84	1.7	1.3	390
SEP 26...	2600	--	450	140	85	57	93	1.9	1.5	--

DATE	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	BROMIDE DIS-SOLVED (MG/L AS BR)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)	SOLIDS, RESIDUE AT 105 DEG. C, DIS-SOLVED (MG/L)
MAR 21...	--	110	52	3.8	--	.1	5.8	202	.11	--
MAY 24...	0	350	270	6.9	.1	.3	23	770	.58	740
JUN 15...	0	320	270	7.4	--	.3	22	726	.80	--
SEP 26...	--	310	300	7.6	.2	.3	23	--	--	--

K BASED ON NON-IDEAL COLONY COUNT.

09306235 CORRAL GULCH BELOW WATER GULCH, NEAR RANGELY, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C)
MAR 21...	--	--	--	--	--	--	--	7.3	--
MAY 24...	1640	1.9	.01	.67	.68	.96	.01	7.1	4.0
JUN 15...	--	--	--	--	--	--	--	6.5	--
SEP 26...	--	.80	.00	.48	.48	.03	.01	6.7	1.1

DATE	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, DISSOLVED (UG/L AS BE)	BORON, DISSOLVED (UG/L AS B)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)
MAY 24...	0	5	800	0	100	3	0	3	0	22
SEP 26...	10	5	0	0	110	1	0	1	20	3

DATE	LITHIUM DISSOLVED (UG/L AS LI)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	STRONTIUM, DISSOLVED (UG/L AS SR)	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, DISSOLVED (UG/L AS ZN)	GROSS ALPHA, DISSOLVED (UG/L AS U-NAT)
MAY 24...	20	20	.0	32	0	2	1800	8.0	10	<8.2
SEP 26...	20	10	.0	23	0	4	2100	5.2	0	12

DATE	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DISSOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DISSOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DISSOLVED, RADON METHOD (PCI/L)	URANIUM NATURAL DISSOLVED (UG/L AS U)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)	OIL AND GREASE (MG/L)
MAY 24...	110	3.9	65	3.4	60	.10	5.9	.00	2	0
SEP 26...	.8	<3.0	1.1	<2.8	1.1	.07	5.1	.00	0	1

09306235 CORRAL GULCH BELOW WATER GULCH, NEAR RANGELY, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	ALDRIN, TOTAL (UG/L)	CHLOR-DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DI-AZINON, TOTAL (UG/L)	DI-ELDRIN TOTAL (UG/L)	ENDO-SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	ETHION, TOTAL (UG/L)
MAY											
24...	1515	.00	.0	.00	.00	.00	.00	.00	.00	.00	.00
SEP											
26...	1520	.00	.0	.00	.00	.00	.00	.00	.00	.00	.00

DATE	HEPTA-CHLOR, TOTAL (UG/L)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MALA-THION, TOTAL (UG/L)	METHYL PARA-THION, TOTAL (UG/L)	METHYL TRI-THION, TOTAL (UG/L)	PARA-THION, TOTAL (UG/L)	TOX-APHENE, TOTAL (UG/L)	TOTAL TRI-THION (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)
MAY											
24...	.00	.00	.00	.00	.00	.00	.00	0	.00	.00	.00
SEP											
26...	.00	.00	.00	.00	.00	.00	.00	0	.00	.00	.00

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1					---	1110		---	1130	1010	1060	1100
2					---	1110		---	1200	1020	1080	1110
3					---	1090		---	1240	1020	1080	1110
4					---	---		---	1220	1030	1090	1090
5					---	---		---	1160	1040	1110	1090
6					---	1030		---	1180	1070	1130	1080
7					---	926		---	1200	1090	1060	1090
8					---	1060		---	1190	1090	1070	1070
9					---	---		---	1160	1060	1080	---
10					---	---		---	1130	---	1090	---
11					---	---		---	1070	---	1110	---
12					---	---		---	1040	1100	1120	1080
13					---	---		---	1030	1160	1140	1080
14					---	---		---	1040	1220	1110	1080
15					---	---		1080	1030	1170	1080	1090
16					---	---		990	1050	1150	1080	1090
17					---	---		---	1020	1140	1080	1090
18					---	---		---	1040	1050	1090	1080
19					---	---		818	1040	10[illegible]	1090	---
20					---	263		---	1060	--	1090	---
21					---	296		---	1060	---	1100	---
22					---	374		---	1080	---	1130	---
23					---	345		---	1080	---	1090	---
24					---	---		789	1100	---	1090	---
25					---	---		1120	1060	---	1100	---
26					---	---		1160	1020	---	1090	---
27					1110	---		1070	1010	---	1100	1040
28					1120	---		1040	1000	---	1100	1040
29					---	---		971	993	---	1110	998
30					---	411		1100	1020	---	1090	1000
31					---	---		1130	---	---	1110	---

09306235 CORRAL GULCH BELOW WATER GULCH, NEAR RANGELY, CO--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---							---	---	3.5	1.0
2	---	---							---	---	4.0	2.0
3	---	---							---	---	3.5	1.0
4	---	---							---	---	2.5	---
5	---	---							---	---	4.0	.5
6	10.0	8.0							---	---	4.5	1.5
7	---	---							---	---	7.0	1.0
8	---	---							---	---	4.0	1.0
9	---	---							---	---	4.5	---
10	---	---							---	---	5.0	0.5
11	---	---							---	---	6.5	.5
12	---	---							---	---	7.5	.5
13	---	---							---	---	8.0	---
14	---	---							---	---	5.5	---
15	---	---							---	---	---	---
16	---	---							---	---	---	---
17	---	---							---	---	---	---
18	---	---							---	---	---	---
19	---	---							---	---	---	---
20	---	---							---	---	2.5	2.5
21	---	---							---	---	3.5	2.5
22	---	---							---	---	4.5	2.5
23	---	---							---	---	4.0	2.5
24	---	---							---	---	---	---
25	---	---							---	---	---	---
26	---	---							---	---	---	---
27	---	---							3.5	3.0	---	---
28	---	---							3.5	1.0	---	---
29	---	---							---	---	---	---
30	---	---							---	---	15.0	2.0
31	---	---							---	---	---	---

09306235 CORRAL GULCH BELOW WATER GULCH, NEAR RANGELY, CO--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1			---	---	23.0	3.5	28.5	8.0	27.0	9.5	24.0	7.0
2			---	---	20.5	5.0	28.5	7.5	28.0	8.5	23.5	7.5
3			---	---	20.5	6.0	28.0	7.0	27.5	8.5	22.0	9.0
4			---	---	23.5	7.5	28.0	6.5	27.5	8.0	20.5	7.5
5			---	---	14.5	2.5	28.0	6.5	28.0	8.0	24.5	8.0
6			---	---	25.5	5.5	28.0	7.5	28.0	8.5	24.0	8.5
7			---	---	25.0	7.0	28.5	7.5	27.5	9.0	24.0	9.5
8			---	---	26.0	7.0	28.0	7.5	25.5	8.5	23.0	8.0
9			---	---	26.0	7.0	29.0	8.0	23.0	9.0	23.0	7.0
10			---	---	23.5	8.5	---	---	26.0	9.0	---	---
11			---	---	25.0	7.5	---	---	26.0	9.0	---	---
12			---	---	24.5	6.0	29.0	9.5	25.5	10.5	19.0	7.5
13			---	---	26.5	7.0	31.0	7.5	25.5	10.0	20.0	3.5
14			---	---	23.0	7.0	30.5	8.5	22.5	7.0	19.5	4.5
15			24.0	7.5	26.0	7.0	24.0	9.0	25.5	5.5	21.0	6.5
16			23.5	3.5	26.0	6.5	27.0	9.0	24.0	7.0	21.0	5.5
17			---	---	26.0	6.5	28.0	10.0	24.0	7.5	20.5	8.0
18			---	---	26.5	6.0	29.0	8.5	23.0	7.0	22.0	3.0
19			24.0	2.0	26.5	7.5	25.5	10.0	24.0	5.5	---	---
20			---	---	26.5	6.5	27.5	10.0	24.0	7.5	---	---
21			---	---	28.0	7.0	27.0	9.0	23.0	8.5	---	---
22			---	---	28.5	7.0	28.5	7.5	24.0	10.0	---	---
23			---	---	28.5	7.5	28.5	7.5	24.5	8.5	---	---
24			22.0	3.5	28.5	9.0	29.0	8.0	25.0	8.0	---	---
25			19.0	4.5	28.0	8.0	29.5	9.5	21.0	8.0	---	---
26			22.5	3.5	27.0	6.0	29.0	9.0	24.0	7.0	---	---
27			18.0	5.5	27.0	6.0	29.5	8.5	24.0	6.0	20.5	5.5
28			22.5	6.5	28.0	7.0	24.0	10.0	24.5	6.5	20.0	5.0
29			23.0	5.0	23.0	8.5	28.5	11.0	24.0	7.0	20.0	3.5
30			22.5	6.0	22.5	8.5	27.5	9.5	23.0	7.0	19.0	4.0
31			22.0	5.0	---	---	23.5	8.5	23.0	7.5	---	---

09306235 CORRAL GULCH BELOW WATER GULCH, NEAR RANGELY, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	.00		.00	.00		.00	.00		.00
2	.00		.00	.00		.00	.00		.00
3	.00		.00	.00		.00	.00		.00
4	.00		.00	.00		.00	.00		.00
5	.17		.12	.00		.00	.00		.00
6	.00		.00	.00		.00	.00		.00
7	.00		.00	.00		.00	.00		.00
8	.00		.00	.00		.00	.00		.00
9	.00		.00	.00		.00	.00		.00
10	.00		.00	.00		.00	.00		.00
11	.00		.00	.00		.00	.00		.00
12	.00		.00	.00		.00	.00		.00
13	.00		.00	.00		.00	.00		.00
14	.00		.00	.00		.00	.00		.00
15	.00		.00	.00		.00	.00		.00
16	.00		.00	.00		.00	.00		.00
17	.00		.00	.00		.00	.00		.00
18	.00		.00	.00		.00	.00		.00
19	.00		.00	.00		.00	.00		.00
20	.00		.00	.00		.00	.00		.00
21	.00		.00	.00		.00	.00		.00
22	.00		.00	.00		.00	.00		.00
23	.00		.00	.00		.00	.00		.00
24	.00		.00	.00		.00	.00		.00
25	.00		.00	.00		.00	.00		.00
26	.00		.00	.00		.00	.00		.00
27	.00		.00	.00		.00	.00		.00
28	.00		.00	.00		.00	.00		.00
29	.00		.00	.00		.00	.00		.00
30	.00		.00	.00		.00	.00		.00
31	.00		.00	---			.00		.00
TOTAL	0.17		0.12	0.00		0.00	0.00		0.00

09306235 CORRAL GULCH BELOW WATER GULCH, NEAR RANGELY, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JANUARY			FEBRUARY			MARCH	
1	.00		.00	.00		.00	.00	---	.00
2	.00		.00	.00		.00	.00	---	.00
3	.00		.00	.00		.00	.00	---	.00
4	.00		.00	.00		.00	.00	---	.00
5	.00		.00	.00		.00	.00	---	.00
6	.00		.00	.00		.00	.00	---	.00
7	.00		.00	.00		.00	.00	---	.00
8	.00		.00	.00		.00	.00	---	.00
9	.00		.00	.00		.00	.00	---	.00
10	.00		.00	.00		.00	.00	---	.00
11	.00		.00	.00		.00	.00	---	.00
12	.00		.00	.00		.00	.00	---	.00
13	.00		.00	.00		.00	.00	---	.00
14	.00		.00	.00		.00	.00	---	.00
15	.00		.00	.00		.00	.00	---	.00
16	.00		.00	.00		.00	.00	---	.00
17	.00		.00	.00		.00	.00	---	.00
18	.00		.00	.00		.00	.00	---	.00
19	.00		.00	.00		.00	.00	---	.00
20	.00		.00	.00		.00	.01	---	.04
21	.00		.00	.00		.00	.03	475	.18
22	.00		.00	.00		.00	.01	---	.08
23	.00		.00	.00		.00	.03	---	.18
24	.00		.00	.00		.00	.00	---	.00
25	.00		.00	.00		.00	.00	---	.00
26	.00		.00	.00		.00	.00	---	.00
27	.00		.00	.00		.00	.00	---	.00
28	.00		.00	.00		.00	.00	---	.00
29	.00		.00	---			.00	---	.00
30	.00		.00	---			.02	---	.14
31	.00		.00	---			.00	---	.00
TOTAL	0.00		0.00	0.00		0.00	0.10	---	0.62

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	.00		.00	.06	---	.95	.48	---	1.5
2	.00		.00	.04	6530	.71	.48	---	1.3
3	.00		.00	.08	---	1.1	.48	---	1.1
4	.00		.00	.16	---	1.8	.48	831	1.1
5	.00		.00	.20	---	2.1	.56	---	4.5
6	.00		.00	.12	---	1.5	.48	---	.92
7	.00		.00	.13	---	1.6	.44	---	.83
8	.00		.00	.00	---	.00	.53	---	.75
9	.00		.00	.06	---	.95	.50	---	.65
10	.00		.00	.07	---	1.0	.50	---	.55
11	.00		.00	.09	---	1.2	.47	---	.45
12	.00		.00	.07	---	1.0	.47	---	.35
13	.00		.00	.12	---	1.5	.47	---	.25
14	.00		.00	.11	---	1.4	.44	---	.15
15	.00		.00	.16	4220	1.8	.41	---	.05
16	.00		.00	.26	---	2.5	.38	62	.06
17	.00		.00	.32	---	3.0	.35	---	.10
18	.00		.00	.38	---	3.2	.35	---	.10
19	.00		.00	.38	---	3.2	.35	---	.10
20	.00		.00	.44	---	3.6	.32	---	.08
21	.01		.30	.47	---	3.8	.32	---	.08
22	.01		.30	.35	---	3.1	.30	35	.03
23	.00		.00	.32	---	3.0	.28	---	.06
24	.00		.00	.35	---	3.1	.28	---	.06
25	.00		.00	.53	---	2.9	.28	---	.06
26	.00		.00	.53	---	2.7	.28	---	.06
27	.02		.45	.53	---	2.5	.28	---	.06
28	.01		.30	.47	---	2.3	.28	102	.08
29	.04		.60	.50	---	2.1	.28	---	.06
30	.04		.60	.50	---	1.9	.22	---	.04
31	---			.50	---	1.7	---	---	---
TOTAL	0.13		2.55	8.30	---	63.21	11.74	---	15.48

09306235 CORRAL GULCH BELOW WATER GULCH, NEAR RANGELY, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JULY			AUGUST			SEPTEMBER	
1	.22	---	.04	.53	100	.26	.49	143	.19
2	.08	---	.01	.56	---	.40	.46	---	.20
3	.16	---	.02	.56	---	.40	.37	---	.12
4	.20	---	.07	.60	---	.60	.15	---	.02
5	.20	197	.11	.56	---	.40	.06	---	.01
6	.16	---	.06	.56	---	.40	.06	---	.01
7	.10	---	.01	.51	173	.24	.15	---	.02
8	.12	---	.02	.54	---	.35	.23	---	.04
9	.02	---	.01	.54	---	.35	.28	---	.06
10	.00	---	.00	.57	---	.45	.37	---	.11
11	.00	---	.00	.58	---	.50	.37	---	.11
12	.03	---	.01	.56	---	.40	.37	---	.11
13	.16	---	.02	.59	---	.55	.35	---	.10
14	.08	---	.01	.60	257	.42	.30	---	.07
15	.10	---	.01	.59	---	.55	.28	---	.06
16	.08	---	.01	.58	---	.50	.28	---	.06
17	.23	---	.04	.56	---	.40	.28	---	.06
18	.41	---	.15	.57	---	.45	.30	---	.07
19	.47	329	.42	.56	---	.40	.30	---	.05
20	.47	---	.42	.57	---	.45	.30	84	.07
21	.44	---	.42	.57	---	.45	.30	---	.07
22	.50	---	.44	.53	---	.35	.30	---	.07
23	.50	---	.44	.51	---	.30	.28	---	.06
24	.50	---	.44	.50	---	.30	.28	---	.06
25	.50	---	.44	.51	---	.30	.28	---	.06
26	.50	327	.44	.52	---	.35	.28	81	.06
27	.50	---	.41	.53	---	.35	.28	---	.06
28	.50	---	.38	.55	---	.40	.28	---	.06
29	.53	---	.35	.56	---	.40	.30	---	.07
30	.50	---	.32	.52	---	.35	.28	---	.06
31	.50	---	.29	.52	---	.35	---	---	---
TOTAL	8.76	---	5.81	17.11	---	12.37	8.59	---	2.17
YEAR	54.90		102.33						

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM (70335)	SED. SUSP. SIEVE DIAM. % FINER THAN 2.00 MM (70336)	SED. SUSP. FALL DIAM. % FINER THAN .062 MM (70342)	SED. SUSP. FALL DIAM. % FINER THAN .125 MM (70343)	SED. SUSP. FALL DIAM. % FINER THAN .250 MM (70344)	SED. SUSP. FALL DIAM. % FINER THAN .500 MM (70345)
MAR											
21...	1500	.21	3240	1.8	97	--	--	--	--	--	--
21...	1515	.21	2670	1.5	98	--	--	--	--	--	--
MAY											
02...	1335	.10	6530	1.8	93	--	--	--	--	--	--
15...	1340	.22	4220	2.5	--	87	92	71	75	78	85

09306237 DRY FORK NEAR RANGELY, CO

LOCATION.--Lat 39°55'20", long 108°31'55", in SE¼NE¼ sec.32, T.1 S., R.99 W., Rio Blanco County, Hydrologic Unit 14050007, on left bank 1.7 mi (2.7 km) upstream from mouth and 18 mi (29 km) southeast of Rangely.

DRAINAGE AREA.--2.74 mi² (7.10 km²).

PERIOD OF RECORD.--March 1974 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 7,030 ft (2,141 m), from topographic map.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 202 ft³/s (5.72 m³/s) July 23, 1977, gage height, 3.16 ft (0.963 m), from slope-area measurement of peak flow; no flow most of each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 0.64 ft³/s (0.018 m³/s) Oct. 6, gage height, 1.82 ft (0.555 m); no peak above base of 2.0 ft³/s (0.057 m³/s); no flow most of year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

OCT. 6   0.14

CAL YR 1977	TOTAL 6.19	MEAN .017	MAX 5.8	MIN .00	AC-FT 12
WTR YR 1978	TOTAL 0.14	MEAN .000	MAX .14	MIN .00	AC-FT .3

09306237 DRY FORK NEAR RANGELY, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1974 to current year.
WATER TEMPERATURE: April 1974 to current year.
SUSPENDED-SEDIMENT DISCHARGE: October 1974 to current year.

INSTRUMENTATION.--Water-quality monitor since April 1974. Pumping sediment sampler since October 1974.

REMARKS.--Flow occurred only on days shown.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,030 micromhos Sept. 3, 1977; minimum, 341 micromhos July 23, 1977.
WATER TEMPERATURES: Maximum, 22.0°C July 23, 1977; minimum, 5.0°C Aug. 26, 1977.
SEDIMENT CONCENTRATIONS: Maximum daily, 6,580 mg/L Oct. 6; no flow many days during year.
SEDIMENT LOADS: Maximum daily, 21 tons (19 t) Oct. 6; no flow many days during year.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Not determined.
WATER TEMPERATURES: Not determined.
SEDIMENT CONCENTRATIONS: Maximum daily, 6,580 mg/L Oct. 6; no flow many days during year.
SEDIMENT LOADS: Maximum daily, 21 tons (19 t) Oct. 6; no flow many days during year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT										
06...	1930	1.0	500	8.3	3.0	120	56	200	15	50

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	BROMIDE DIS-SOLVED (MG/L AS BR)
OCT										
06...	19	36	1.1	4.9	230	0	190	93	4.0	.1

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
OCT										
06...	.6	15	346	.93	1.5	.85	1.2	2.0	.30	.02

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, DISSOLVED (UG/L AS BE)	BORON, DISSOLVED (UG/L AS B)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)
OCT										
06...	10	13	0	0	180	0	5	10	50	1

DATE	LITHIUM DISSOLVED (UG/L AS LI)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	STRONTIUM, DISSOLVED (UG/L AS SR)	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, DISSOLVED (UG/L AS ZN)
OCT									
06...	10	60	.0	12	3	2	610	6.5	20

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---										
2	---	---										
3	---	---										
4	---	---										
5	---	---										
6	12.5	10.5										
7	---	---										
8	---	---										
9	---	---										
10	---	---										
11	---	---										
12	---	---										
13	---	---										
14	---	---										
15	---	---										
16	---	---										
17	---	---										
18	---	---										
19	---	---										
20	---	---										
21	---	---										
22	---	---										
23	---	---										
24	---	---										
25	---	---										
26	---	---										
27	---	---										
28	---	---										
29	---	---										
30	---	---										
31	---	---										

09306237 DRY FORK NEAR RANGELY, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	.00	---	---	.00			.00		
2	.00	---	---	.00			.00		
3	.00	---	---	.00			.00		
4	.00	---	---	.00			.00		
5	.00	---	---	.00			.00		
6	.14	6580	21	.00			.00		
7	.00	---	---	.00			.00		
8	.00	---	---	.00			.00		
9	.00	---	---	.00			.00		
10	.00	---	---	.00			.00		
11	.00	---	---	.00			.00		
12	.00	---	---	.00			.00		
13	.00	---	---	.00			.00		
14	.00	---	---	.00			.00		
15	.00	---	---	.00			.00		
16	.00	---	---	.00			.00		
17	.00	---	---	.00			.00		
18	.00	---	---	.00			.00		
19	.00	---	---	.00			.00		
20	.00	---	---	.00			.00		
21	.00	---	---	.00			.00		
22	.00	---	---	.00			.00		
23	.00	---	---	.00			.00		
24	.00	---	---	.00			.00		
25	.00	---	---	.00			.00		
26	.00	---	---	.00			.00		
27	.00	---	---	.00			.00		
28	.00	---	---	.00			.00		
29	.00	---	---	.00			.00		
30	.00	---	---	.00			.00		
31	.00	---	---	---			.00		
TOTAL	0.14	---	21	0.00			0.00		
YEAR	0.14		21						

09306240 BOX ELDER GULCH NEAR RANGELY, CO

LOCATION.--Lat 39°53'18", long 108°31'40", in NE¼SW¼ sec.8, T.2 S., R.99 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 30 ft (9 m) upstream from unnamed tributary, 4.1 mi (6.6 km) upstream from mouth, and 20 mi (32 km) southeast of Rangely.

DRAINAGE AREA.--9.21 mi² (23.85 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1974 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,955 ft (2,120 m), from topographic map.

REMARKS.--Records good. No diversion or regulation above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 30 ft³/s (0.85 m³/s) Aug. 25, 1977, gage height, 2.33 ft (0.710 m); no flow most days each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3.1 ft³/s (0.088 m³/s) at 0815 Apr. 18, gage height, 1.77 ft (0.539 m); no flow most days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	1.4	1.6	1.0	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	1.4	1.5	1.0	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	1.5	1.4	.96	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	1.0	1.5	.84	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	1.4	1.7	.92	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	1.6	1.7	.84	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	1.7	1.7	.76	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	2.1	1.7	.72	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	1.9	1.6	.68	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	2.0	1.7	.68	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	1.8	1.7	.65	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	1.7	1.7	.59	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	1.8	1.7	.43	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	1.8	1.7	.32	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	1.8	1.7	.25	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	1.8	1.7	.26	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	1.7	1.6	.18	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	2.0	1.6	.15	.00	.00	.00
19	.00	.00	.00	.00	.00	.02	1.8	1.5	.12	.00	.00	.00
20	.00	.00	.00	.00	.00	.06	1.5	1.7	.13	.00	.00	.00
21	.00	.00	.00	.00	.00	.04	1.6	1.7	.07	.00	.00	.00
22	.00	.00	.00	.00	.00	.30	1.7	1.6	.07	.00	.00	.00
23	.00	.00	.00	.00	.00	.40	1.5	1.6	.07	.00	.00	.00
24	.00	.00	.00	.00	.00	.65	1.4	1.6	.05	.00	.00	.00
25	.00	.00	.00	.00	.00	.11	1.4	1.4	.06	.00	.00	.00
26	.00	.00	.00	.00	.00	.16	1.4	1.4	.05	.00	.00	.00
27	.00	.00	.00	.00	.00	.49	1.5	1.4	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.76	1.4	1.4	.00	.00	.00	.00
29	.00	.00	.00	.00	---	.84	1.4	1.2	.00	.00	.00	.00
30	.00	.00	.00	.00	---	1.2	1.5	1.2	.00	.00	.00	.00
31	.00	---	.00	.00	---	1.2	---	1.1	---	.00	.00	---
TOTAL	.00	.00	.00	.00	.00	6.23	48.5	48.3	11.85	.00	.00	.00
MEAN	.000	.000	.000	.000	.000	.20	1.62	1.56	.40	.000	.000	.000
MAX	.00	.00	.00	.00	.00	1.2	2.1	1.7	1.0	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.00	1.0	1.1	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	.00	12	96	96	24	.00	.00	.00

CAL YR 1977 TOTAL 2.57 MEAN .007 MAX .91 MIN .00 AC-FT 5.1
WTR YR 1978 TOTAL 114.88 MEAN .31 MAX 2.1 MIN .00 AC-FT 228

09306240 BOX ELDER GULCH NEAR RANGELY, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1974 to current year.
WATER TEMPERATURE: April 1974 to current year.
SUSPENDED-SEDIMENT DISCHARGE: March 1975 to current year.

INSTRUMENTATION.--Water-quality monitor since April 1974. Pumping sediment sampler since March 1975.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 968 micromhos Apr. 6, 1978; minimum, 202 micromhos Mar. 22, 1978.
WATER TEMPERATURES: Maximum, 32.0°C June 20, 1978; minimum, 0.0°C Mar. 21-23, 1978.
SEDIMENT CONCENTRATIONS: Maximum daily, 8,400 mg/L Apr. 1, 1978; no flow many days each year.
SEDIMENT LOADS: Maximum daily, 32 tons (29 t) Apr. 1, 1978; no flow many days each year.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 968 micromhos Apr. 6; minimum, 202 micromhos Mar. 22.
WATER TEMPERATURES: Maximum, 32.0°C June 20; minimum, 0.0°C Mar. 21-23.
SEDIMENT CONCENTRATIONS: Maximum daily, 8,400 mg/L Apr. 1; no flow many days during year.
SEDIMENT LOADS: Maximum daily, 32 tons (29 t) Apr. 1; no flow many days during year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)
MAR 22...	1330	.55	580	8.0	.5	--	--	--	--	--
APR 20...	1045	E1.6	850	8.3	12.0	6	11.9	47	<1	K200
JUN 16...	1120	.68	850	7.2	19.0	--	7.6	--	--	--

DATE	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)
MAR 22...	230	43	53	24	44	1.3	4.3	230	0
APR 20...	390	80	72	51	54	1.2	1.2	380	0
JUN 16...	370	89	65	50	61	1.4	.9	340	0

DATE	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	BROMIDE DIS-SOLVED (MG/L AS BR)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)	SOLIDS, RESIDUE AT 105 DEG. C, DIS-SOLVED (MG/L)
MAR 22...	190	120	4.7	--	.2	9.1	373	.55	--
APR 20...	310	170	6.3	.1	.3	20	571	2.47	580
JUN 16...	280	200	6.2	--	.3	22	573	.95	--

E ESTIMATED.

K BASED ON NON-IDEAL COLONY COUNT.

09306240 BOX ELDER GULCH NEAR RANGELY, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)
MAR									
22...	--	--	--	--	--	--	--	13	--
APR									
20...	350	1.5	.01	.33	.34	.28	.00	--	2.7
JUN									
16...	--	--	--	--	--	--	--	7.8	--

DATE	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)
APR										
20...	230	8	0	10	90	0	0	6	350	10

DATE	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT)
APR										
20...	20	0	.0	38	3	3	1400	4.0	10	<6.0

DATE	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DIS-SOLVED, RADON METHOD (PCI/L)	URANIUM NATURAL DIS-SOLVED (UG/L AS U)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)	OIL AND GREASE (MG/L)
APR										
20...	17	3.7	14	3.3	13	.16	7.1	.00	0	0

DATE	TIME	ALDRIN, TOTAL (UG/L)	CHLOR DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DI-AZINON, TOTAL (UG/L)	DI-ELDRIN TOTAL (UG/L)	ENDO-SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	ETHION, TOTAL (UG/L)
APR											
20...	1045	.00	.0	.00	00	.00	.00	.00	.00	.00	.00

DATE	HEPTA-CHLOR, TOTAL (UG/L)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MALA-THION, TOTAL (UG/L)	METHYL PARA-THION, TOTAL (UG/L)	METHYL TRI-THION, TOTAL (UG/L)	PARA-THION, TOTAL (UG/L)	TOX-APHENE, TOTAL (UG/L)	TOTAL TRI-THION (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)
APR											
20...	.00	.00	.00	.00	.00	.00	.00	0	.00	.00	.00

09306240 BOX ELDER GULCH NEAR RANGELY, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						---	579	738	812			
2						---	---	794	796			
3						---	---	832	804			
4						---	---	833	802			
5						---	---	835	789			
6						---	682	832	799			
7						---	846	824	800			
8						---	853	814	701			
9						---	855	703	777			
10						---	846	709	795			
11						---	823	618	699			
12						---	826	562	723			
13						---	826	629	752			
14						---	829	584	790			
15						---	811	716	799			
16						---	798	827	796			
17						---	744	814	795			
18						---	623	809	793			
19						---	693	793	785			
20						---	769	780	781			
21						260	828	755	766			
22						493	804	728	765			
23						577	767	680	730			
24						621	816	711	703			
25						406	696	814	724			
26						480	800	831	735			
27						---	700	829	---			
28						---	800	819	---			
29						595	800	821	---			
30						600	783	814	---			
31						---	---	817	---			

09306240 BOX ELDER GULCH NEAR RANGELY, CO--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	10.5	4.0	14.0	.0	24.0	1.5						
2	---	---	19.0	2.0	21.0	2.5						
3	---	---	17.5	4.0	21.0	4.0						
4	---	---	10.0	2.0	24.0	6.5						
5	---	---	8.0	1.0	10.5	7.0						
6	18.5	4.0	12.5	.5	26.0	4.0						
7	19.0	3.0	11.0	.0	29.0	5.5						
8	19.0	3.5	13.5	2.0	29.5	5.5						
9	9.0	1.0	21.5	.5	27.5	5.5						
10	15.0	.0	19.0	2.5	24.0	7.0						
11	19.0	5.0	16.0	3.5	28.5	6.5						
12	17.5	.5	20.5	1.5	26.0	3.5						
13	11.5	2.5	23.5	2.5	28.0	5.5						
14	17.5	3.0	23.0	4.0	26.0	5.0						
15	16.5	2.5	23.0	4.5	27.0	5.5						
16	16.0	1.5	23.0	5.0	27.0	4.5						
17	9.0	.0	17.5	4.0	29.0	4.0						
18	17.0	.0	19.0	2.0	27.0	4.0						
19	16.5	.0	22.0	2.5	30.5	5.5						
20	19.0	.5	22.5	3.5	32.0	4.5						
21	6.5	.0	15.0	6.5	30.0	6.0						
22	16.0	.0	22.0	4.0	30.5	7.0						
23	18.5	.0	19.5	5.5	28.5	7.5						
24	21.5	.0	21.0	3.5	27.5	10.0						
25	12.5	3.0	17.5	4.0	27.5	7.0						
26	17.5	2.5	22.0	2.5	25.0	4.5						
27	11.5	2.5	16.0	5.0	---	---						
28	20.5	2.0	22.5	5.5	---	---						
29	14.0	3.0	24.0	4.0	---	---						
30	12.5	3.0	24.0	5.0	---	---						
31	---	---	22.5	4.0	---	---						

09306240 BOX ELDER GULCH NEAR RANGELY, CO--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1											---	---
2											---	---
3											---	---
4											---	---
5											---	---
6											---	---
7											---	---
8											---	---
9											---	---
10											---	---
11											---	---
12											---	---
13											---	---
14											---	---
15											---	---
16											---	---
17											---	---
18											---	---
19											---	---
20											---	---
21											.0	.0
22											.0	.0
23											1.0	.0
24											3.5	.5
25											3.5	3.0
26											4.5	1.0
27											9.5	1.0
28											13.5	2.0
29											21.5	2.0
30											19.0	1.0
31											---	---

09306240 BOX ELDER GULCH NEAR RANGELY, CO--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JANUARY			FEBRUARY			MARCH	
1	.00			.00			.00	---	---
2	.00			.00			.00	---	---
3	.00			.00			.00	---	---
4	.00			.00			.00	---	---
5	.00			.00			.00	---	---
6	.00			.00			.00	---	---
7	.00			.00			.00	---	---
8	.00			.00			.00	---	---
9	.00			.00			.00	---	---
10	.00			.00			.00	---	---
11	.00			.00			.00	---	---
12	.00			.00			.00	---	---
13	.00			.00			.00	---	---
14	.00			.00			.00	---	---
15	.00			.00			.00	---	---
16	.00			.00			.00	---	---
17	.00			.00			.00	---	---
18	.00			.00			.00	---	---
19	.00			.00			.02	---	.05
20	.00			.00			.06	---	.10
21	.00			.00			.04	---	.10
22	.00			.00			.30	1610	2.6
23	.00			.00			.40	3820	6.1
24	.00			.00			.65	4900	5.3
25	.00			.00			.11	---	.40
26	.00			.00			.16	4310	2.5
27	.00			.00			.49	3840	5.1
28	.00			.00			.76	8670	18
29	.00			---			.84	6480	15
30	.00			---			1.2	7980	26
31	.00			---			1.2	---	25
TOTAL	0.00			0.00			6.23	---	106.25

09306240 BOX ELDER GULCH NEAR RANGELY, CO--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	1.4	8400	32	1.6	510	2.4	1.0	---	.38
2	1.4	5060	19	1.5	612	2.5	1.0	---	.36
3	1.5	---	20	1.4	437	1.7	.96	---	.28
4	1.0	---	14	1.5	512	2.1	.84	116	.26
5	1.4	---	18	1.7	604	2.8	.92	209	.52
6	1.6	4810	21	1.7	570	2.6	.84	99	.22
7	1.7	3450	16	1.7	551	2.5	.76	110	.23
8	2.1	3620	21	1.7	518	2.4	.72	104	.20
9	1.9	2520	13	1.6	506	2.2	.68	---	.12
10	2.0	1980	11	1.7	552	2.5	.68	---	.12
11	1.8	2800	14	1.7	513	2.4	.65	---	.12
12	1.7	1760	8.1	1.7	506	2.3	.59	---	.10
13	1.8	1830	8.9	1.7	636	2.9	.43	---	.06
14	1.8	1980	9.6	1.7	989	4.5	.32	---	.04
15	1.8	2340	11	1.7	764	3.5	.25	---	.03
16	1.8	2150	10	1.7	847	3.9	.26	---	.03
17	1.7	1260	5.8	1.6	924	4.0	.18	---	.02
18	2.0	---	20	1.6	836	3.6	.15	---	.02
19	1.8	---	18	1.5	666	2.7	.12	---	.02
20	1.5	1350	5.5	1.7	688	3.2	.13	---	.02
21	1.6	1250	5.4	1.7	622	2.9	.07	---	.01
22	1.7	---	6.0	1.6	462	2.0	.07	---	.01
23	1.5	---	5.5	1.6	407	1.8	.07	---	.01
24	1.4	2100	7.9	1.6	429	1.9	.05	---	.01
25	1.4	0	5.5	1.4	522	2.0	.06	---	.01
26	1.4	---	4.0	1.4	390	1.5	.05	---	.01
27	1.5	1060	4.3	1.4	336	1.3	.00	---	---
28	1.4	437	1.7	1.4	418	1.6	.00	---	---
29	1.4	494	1.9	1.2	242	.78	.00	---	---
30	1.5	720	2.9	1.2	---	.50	.00	---	---
31	---	---	---	1.1	---	.42	---	---	---
TOTAL	48.5	---	341.0	48.3	---	73.40	11.85	---	3.21
YEAR	114.88		523.86						

09306241 BOX ELDER GULCH TRIBUTARY NEAR RANGELY, CO

LOCATION.--Lat 39°54'50", long 108°29'06", in SE¼SE¼ sec.34, T.1 S., R.99 W., Rio Blanco County, Hydrologic Unit 14050006, on right bank 880 ft (268 m) above mouth, 3.5 mi (5.6 km) west of 84 Ranch, and 20.5 mi (33.0 km) southwest of Rangely.

DRAINAGE AREA.--2.39 mi² (6.19 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1974 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,655 ft (2,028 m), from topographic map.

REMARKS.--Records excellent except for day of flow, which is fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5.0 ft³/s (0.14 m³/s) Sept. 11, 1977 (slope-area measurement); no flow most of each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1.6 ft³/s (0.045 m³/s) at 1600 June 5, gage height, 1.41 ft (0.430 m); no flow most of year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

JUNE 5   0.12

CAL YR 1977   TOTAL 0.41 MEAN .001 MAX .41 MIN .00 AC-FT .8
WTR YR 1978   TOTAL 0.12 MEAN .000 MAX .12 MIN .00 AC-FT .2

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1974 to current year.
WATER TEMPERATURE: April 1974 to current year.
SUSPENDED-SEDIMENT DISCHARGE: October 1974 to current year.

INSTRUMENTATION.--Water-quality monitor since April 1974. Pumping sediment sampler since October 1974.

REMARKS.--Flow occurred only on days shown.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 422 micromhos Sept. 11, 1977; minimum, 284 micromhos Sept. 11, 1977.
WATER TEMPERATURES: Not determined.
SEDIMENT CONCENTRATIONS: Maximum daily, 10,800 mg/L Feb. 28, 1976; no flow many days each year.
SEDIMENT LOADS: Maximum daily, 44 tons (40 t) Feb. 28, 1976; no flow many days each year.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Not determined.
WATER TEMPERATURES: Not determined.
SEDIMENT CONCENTRATIONS: Maximum daily, 2,800 mg/L, estimated June 5; no flow many days during year.
SEDIMENT LOADS: Maximum daily, 0.90 ton (0.82 t) estimated June 5; no flow many days during year.

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JUNE 5	0.12	2,800	.90
YEAR	0.12		.90

09306242 CORRAL GULCH NEAR RANGELY, CO

LOCATION.--Lat 39°55'13", long 108°28'20", in SE¼NW¼ sec.3, T.1 S., R.99 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 5 ft (2 m) downstream from Boxelder Creek, 3.5 mi (5.6 km) upstream from confluence with Stake Springs Draw, and 21 mi (34 km) southeast of Rangely.

DRAINAGE AREA.--31.6 mi² (81.8 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1974 to current year.

GAGE.--Water-stage recorder. Concrete control since July 20, 1974. Altitude of gage is 6,570 ft (2,003 m), from topographic map.

REMARKS.--Records good. No diversion above station. Flow not all natural as ground water from mining operations upstream from the gage is included.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 183 ft³/s (5.18 m³/s) July 23, 1977, gage height, 3.89 ft (1.186 m); minimum daily, 0.06 ft³/s (0.002 m³/s) Apr. 10-14, 1974.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 16 ft³/s (0.453 m³/s) at 1645 June 5, gage height, 2.35 ft (0.716 m); minimum daily, 0.14 ft³/s (0.004 m³/s) Jan. 4, Feb. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.35	.31	.31	1.0	.73	.20	1.2	2.3	3.2	4.2	4.2	3.2
2	.35	.31	.35	.28	.79	.18	1.2	2.0	2.8	4.0	4.2	3.3
3	.31	.31	.31	.22	.73	.16	1.2	1.7	2.8	3.9	3.9	3.2
4	.31	.27	.31	.14	.63	.16	1.4	2.4	3.3	3.9	4.0	3.2
5	.35	.27	.31	.18	.51	.18	2.3	2.8	5.0	4.0	3.7	3.0
6	1.1	.31	.35	.39	.63	.20	2.0	2.4	4.8	3.8	3.9	3.2
7	.59	.27	.34	.43	.63	1.1	2.2	2.9	4.4	3.7	3.8	3.2
8	.27	.27	.43	.77	.64	.51	2.3	3.4	3.7	3.5	3.4	3.5
9	.23	.27	.32	1.3	.63	.55	2.1	3.4	3.7	3.6	3.4	3.4
10	.23	.27	.44	.18	.59	.55	2.2	3.8	4.0	3.8	3.4	3.3
11	.20	.27	.27	.16	.51	.39	1.9	5.0	3.4	4.2	3.0	3.6
12	.23	.27	.27	.18	.51	.43	2.1	5.4	3.2	4.1	3.1	3.8
13	.27	.27	.27	.18	.54	.55	2.7	4.6	3.5	4.2	3.2	3.4
14	.27	.23	.27	.18	.49	.47	2.6	4.2	5.4	4.1	3.7	3.4
15	.27	.23	.24	.18	.49	2.2	2.4	4.3	4.4	3.9	3.3	3.3
16	.27	.27	.27	.18	.22	2.8	2.4	4.8	6.7	3.8	3.1	3.7
17	.27	.27	.24	.20	.24	2.9	2.4	5.4	4.7	3.8	3.1	3.8
18	.27	.27	.24	.20	.22	3.3	1.8	5.0	5.2	3.9	2.8	3.9
19	.27	.27	.24	.20	.43	2.0	2.1	3.6	4.9	4.0	3.1	3.8
20	.27	.27	.24	.20	.35	1.8	2.1	3.8	5.2	4.0	3.2	3.7
21	.31	.27	.24	.20	.39	1.5	2.4	3.7	5.6	3.9	3.0	3.5
22	.27	.27	.24	.20	.31	1.9	2.1	3.0	5.1	3.8	2.3	3.4
23	.27	.27	.24	.20	.14	1.8	2.0	2.8	4.9	3.8	2.0	2.9
24	.27	.27	.22	.20	.16	1.5	2.2	3.0	5.7	3.8	2.1	3.0
25	.27	.27	.20	.20	.16	1.2	2.1	3.2	5.8	3.7	2.7	3.4
26	.27	.27	.20	1.0	.20	1.1	1.3	3.0	5.6	3.6	3.2	4.0
27	.27	.27	.20	1.[illegible]	.20	1.0	1.8	2.6	4.6	3.7	3.3	3.7
28	.27	.31	.20	1.1	.18	.73	2.1	2.7	3.7	3.9	3.3	3.0
29	.27	.31	.20	.93	---	.70	3.0	2.6	4.0	4.0	3.4	3.0
30	.27	.31	.20	.68	---	.46	4.1	2.7	4.1	4.1	3.2	2.9
31	.27	---	.36	.59	---	.81	---	2.9	---	3.9	3.2	---
TOTAL	9.69	8.30	8.52	1[illegible].25	12.25	33.33	63.7	105.4	133.4	120.6	101.2	101.7
MEAN	.31	.28	.27	.43	.44	1.08	2.12	3.40	4.45	3.89	3.26	3.39
MAX	1.1	.31	.44	1.3	.79	3.3	4.1	5.4	6.7	4.2	4.2	4.0
MIN	.20	.23	.20	.14	.14	.16	1.2	1.7	2.8	3.5	2.0	2.9
AC-FT	19	16	17	26	24	66	126	209	265	239	201	202

CAL YR 1977 TOTAL 122.69 MEAN .34 MAX 8.0 MIN .11 AC-FT 243
WTR YR 1978 TOTAL 711.34 MEAN 1.95 MAX 6.7 MIN .14 AC-FT 1410

09306242 CORRAL GULCH NEAR RANGELY, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--March 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1975 to current year.
WATER TEMPERATURE: January 1975 to current year.
SUSPENDED-SEDIMENT DISCHARGE: October 1974 to current year.

INSTRUMENTATION.--Water-quality monitor since October 1974. Pumping sediment sampler since October 1974.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 3,000 micromhos July 17, 1976; minimum, 455 micromhos Aug. 24, 1977.
WATER TEMPERATURES: Maximum, 25.0°C July 13, 24, 25, 1978; minimum, 0.0°C on several days during winter months.
SEDIMENT CONCENTRATIONS: Maximum daily, 88,000 mg/L, estimated Sept. 11, 1977; minimum daily, 4 mg/L Dec. 5, 1977.
SEDIMENT LOADS: Maximum daily, 1,400 tons, estimated (1,300 t) Sept. 11, 1977; minimum daily, 0.00 ton (0.00 t) on many days during 1977.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum 1,680 micromhos, Aug. 14; minimum, 751 micromhos Feb. 25.
WATER TEMPERATURES: Maximum, 25.0°C July 13, 24, 25; minimum, 0.0°C Feb. 3.
SEDIMENT CONCENTRATIONS: Maximum daily, 15,100 mg/L, Mar. 18; minimum daily, 4 mg/L Dec. 5.
SEDIMENT LOADS: Maximum daily, 143 tons (130 t) June 16; minimum daily, less than 0.005 ton (0.005 t) Nov. 9, 10, Dec. 5.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)
OCT										
19...	1100	.28	1150	7.6	12.0	7	10.4	18	--	--
DEC										
29...	1210	.22	1200	7.8	9.0	--	10.6	--	--	--
JAN										
07...	1740	.58	1310	8.1	2.0	--	10.0	--	--	--
26...	1415	1.4	1150	8.1	1.0	--	12.8	--	--	--
MAR										
23...	1530	1.8	1300	8.2	16.0	--	8.1	--	--	--
APR										
20...	0915	2.1	1175	7.5	6.0	7	9.5	120	--	2100
JUN										
16...	0900	7.0	1250	7.2	16.0	--	9.4	--	--	--
SEP										
26...	1330	4.0	1400	8.0	19.0	8	6.6	43	3.6	440

DATE	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)
OCT									
19...	500	98	87	68	98	1.9	1.7	490	0
DEC									
29...	530	110	91	74	130	2.5	1.7	510	0
JAN									
07...	510	63	79	77	150	2.9	3.0	550	0
26...	450	22	66	69	140	2.9	3.3	520	0
MAR									
23...	530	97	81	80	150	2.8	2.3	530	0
APR									
20...	450	81	77	62	97	2.0	1.8	450	0
JUN									
16...	470	0	55	80	170	3.4	1.2	590	0
SEP									
26...	470	17	59	76	180	3.7	1.1	--	--

09306242 CORRAL GULCH NEAR RANGELY, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	BROMIDE DISSOLVED (MG/L AS BR)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER DAY)	SOLIDS, RESIDUE AT 105 DEG. C, DISSOLVED (MG/L)
OCT									
19...	400	310	10	.1	.5	21	841	.64	980
DEC									
29...	420	330	12	--	.5	21	912	.54	--
JAN									
07...	450	340	14	--	.8	28	963	1.51	--
26...	430	320	9.2	--	.9	29	894	3.38	--
MAR									
23...	430	350	12	--	.8	23	960	4.72	--
APR									
20...	370	250	8.6	.1	.4	19	744	4.22	760
JUN									
16...	480	290	12	--	1.2	24	924	17.7	--
SEP									
26...	450	370	10	.1	1.0	28	--	--	--

DATE	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C)
OCT									
19...	4	.20	.01	.46	.47	.09	.02	6.9	.6
DEC									
29...	--	--	--	--	--	--	--	5.6	--
JAN									
07...	--	--	--	--	--	--	--	6.8	--
26...	--	--	--	--	--	--	--	7.2	--
MAR									
23...	--	--	--	--	--	--	--	7.2	--
APR									
20...	4100	.90	.03	.28	.31	1.4	.04	16	>5.0
JUN									
16...	--	--	--	--	--	--	--	6.1	--
SEP									
26...	--	.14	.09	.24	.33	.41	.01	5.1	.6

DATE	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, DISSOLVED (UG/L AS BE)	BORON, DISSOLVED (UG/L AS B)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)
OCT										
19...	50	9	100	20	130	1	18	7	70	6
APR										
20...	0	7	0	0	110	3	0	5	50	36
SEP										
26...	20	5	100	0	180	1	0	1	20	4

DATE	LITHIUM DISSOLVED (UG/L AS LI)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	STRONTIUM, DISSOLVED (UG/L AS SR)	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, DISSOLVED (UG/L AS ZN)	GROSS ALPHA, DISSOLVED (UG/L AS U-NAT)
OCT										
19...	10	80	.0	19	1	2	1900	4.6	40	18
APR										
20...	30	10	.0	34	2	2	2200	3.0	10	<8.0
SEP										
26...	80	40	.0	19	0	1	5600	1.9	0	<26

09306242 CORRAL GULCH NEAR RANGELY, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	GROSS ALPHA, SUSP, TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP, TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP, TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DIS-SOLVED, RADON METHOD (PCI/L)	URANIUM NATURAL DIS-SOLVED (UG/L AS U)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)	OIL AND GREASE (MG/L)
OCT 19...	<.4	<6.4	.6	<5.1	.5	.21	3.1	.00	0	0
APR 20...	290	4.5	190	4.0	170	.14	5.0	.00	5	0
SEP 26...	.6	16	1.6	15	1.5	.07	--	.00	1	1

DATE	TIME	ALDRIN, TOTAL (UG/L)	CHLOR-DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DI-AZINON, TOTAL (UG/L)	DI-ELDRIN TOTAL (UG/L)	ENDO-SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	ETHION, TOTAL (UG/L)
OCT 19...	1100	.00	.0	.00	.00	.00	.00	.00	.00	.00	.00
APR 20...	0915	.00	.0	.00	.00	.00	.00	.00	.00	.00	.00
SEP 26...	1330	.00	.0	.00	.00	.00	.00	.00	.00	.00	.00

DATE	HEPTA-CHLOR, TOTAL (UG/L)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MALA-THION, TOTAL (UG/L)	METHYL PARA-THION, TOTAL (UG/L)	METHYL TRI-THION, TOTAL (UG/L)	PARA-THION, TOTAL (UG/L)	TOX-APHENE, TOTAL (UG/L)	TOTAL TRI-THION (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)
OCT 19...	.00	.00	.00	.00	.00	.00	.00	0	.00	.00	.00
APR 20...	.00	.00	.00	.00	.00	.00	.00	0	.00	.00	.00
SEP 26...	.00	.00	.00	.00	.00	.00	.00	0	.00	.00	.00

09306242 CORRAL GULCH NEAR RANGELY, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1170	1170	1170	---	---	---	1180	---	1270	1310	---	1460
2	1170	1170	1190	---	---	1150	1180	1180	1260	1310	---	1460
3	1170	1180	1180	---	---	1090	1170	1200	1290	1320	---	1460
4	1160	1180	1170	1180	---	1110	---	1180	1300	1310	1320	1450
5	---	1210	1150	1170	1140	1100	---	1170	1260	1320	1330	1440
6	---	1190	1170	1050	---	1030	---	1170	1300	1310	1340	1430
7	1150	1130	---	1050	---	1130	1170	1170	1290	1340	1360	1420
8	1150	1140	1090	972	---	---	1200	1210	1300	1370	1370	1430
9	1150	1120	1100	952	---	1180	1190	---	1270	1350	1340	1430
10	1160	1120	1120	1160	1180	1180	1180	---	1270	1340	1340	1430
11	1150	1130	1090	1160	1150	1230	1130	---	1190	1330	1450	1400
12	1140	1130	1080	1130	1120	1210	1150	1250	1180	1340	1450	1420
13	1150	1130	---	1040	1120	1280	1130	1220	1210	1340	1450	1440
14	1160	1130	---	1050	1090	1350	1150	1230	1290	1340	1470	1480
15	1170	1120	1130	1090	1130	1310	1100	1220	1210	1340	1430	1450
16	1170	1160	1060	1060	1210	1150	1110	1240	1250	1330	1440	1440
17	1170	1180	1060	1200	1180	1160	1100	1280	1260	1320	1440	1420
18	1170	1190	1060	1160	1140	1130	1170	1230	1260	1350	1450	1390
19	1180	1190	---	1160	1130	1180	1170	1210	1260	1350	1410	1430
20	1190	1190	---	1160	980	1190	1170	1180	1280	---	1430	1420
21	1170	1210	---	1150	952	1240	1220	1260	1250	---	1440	1420
22	1160	1170	---	1160	993	1210	1270	1190	1270	---	1480	1430
23	1160	1160	1120	1140	999	1240	1280	1160	1290	---	1480	1440
24	1160	1160	---	1130	1020	1210	1290	1140	1270	1330	1500	1450
25	1160	1160	---	1140	892	1160	1230	1230	1260	1340	1470	1430
26	1170	1180	---	1150	1010	1150	1190	1230	1270	1320	1430	1400
27	1180	1180	---	1180	1090	---	1190	1220	1280	1310	1450	1430
28	1180	1180	---	1190	---	---	1210	1240	1300	1310	1450	1440
29	1180	1180	---	1130	---	1360	1250	1250	1320	1310	1450	1440
30	1170	1160	---	1120	---	1310	---	1260	1310	1310	1450	1440
31	1170	---	---	945	---	1220	---	1260	---	---	1470	---

09306242 CORRAL GULCH NEAR RANGELY, CO--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	13.5	6.0	12.0	6.0	8.5	6.0	---	---	8.5	7.0	---	---
2	13.5	6.5	13.0	6.0	9.0	7.0	---	---	8.5	1.5	8.5	6.5
3	14.0	6.5	13.0	6.5	8.5	6.5	---	---	7.5	.0	8.0	5.5
4	14.0	8.0	11.5	7.0	8.5	5.5	9.0	6.0	9.0	2.0	9.0	4.5
5	13.5	7.5	9.0	7.0	8.0	5.5	9.5	7.5	8.0	4.5	9.5	6.5
6	14.0	6.0	12.0	7.0	8.0	5.5	9.0	8.0	---	---	8.5	6.0
7	12.5	5.5	8.5	5.0	---	---	10.0	8.0	---	---	11.0	4.0
8	9.5	6.5	9.0	4.0	12.0	6.5	11.5	8.5	---	---	---	---
9	12.5	6.0	10.0	5.0	8.5	7.5	9.0	6.5	---	---	12.5	6.5
10	12.0	6.0	10.5	5.0	8.5	4.5	9.0	7.5	7.0	4.0	11.5	6.0
11	12.0	6.0	11.0	6.5	9.0	6.5	8.5	7.5	8.0	3.5	10.0	5.5
12	12.5	6.0	10.5	6.0	8.0	7.0	9.5	7.5	7.5	3.0	9.5	6.0
13	13.0	7.0	10.0	6.0	---	---	9.5	8.0	11.0	3.5	11.5	4.5
14	13.0	7.0	9.5	6.5	---	---	9.5	8.0	8.0	3.5	8.5	3.5
15	13.5	7.5	10.5	6.0	9.0	7.5	9.5	7.5	8.0	2.0	11.0	.5
16	13.5	7.5	10.0	5.5	9.5	8.0	10.0	7.0	8.0	4.0	18.0	3.5
17	12.0	8.0	8.5	7.0	11.5	7.5	9.5	7.0	7.0	4.5	17.5	2.5
18	13.0	8.0	7.0	5.0	9.0	7.5	8.0	6.0	7.5	3.5	18.5	5.5
19	12.5	7.5	8.0	3.5	---	---	8.0	5.5	7.5	3.5	15.5	5.0
20	11.0	8.0	8.0	3.5	---	---	8.5	6.5	6.5	4.0	20.0	4.5
21	12.5	7.5	8.0	6.0	---	---	8.5	5.5	8.5	3.5	20.5	4.5
22	13.0	7.0	9.0	6.0	---	---	8.0	5.5	8.0	3.0	13.0	6.5
23	12.5	7.0	8.5	6.5	8.0	6.5	6.5	5.5	9.5	3.5	18.5	6.0
24	13.5	7.0	9.0	6.5	---	---	7.5	5.0	9.5	4.0	18.5	1.5
25	13.5	7.0	9.5	6.5	---	---	7.5	4.5	8.5	6.0	19.5	.5
26	13.5	7.0	8.0	6.0	---	---	5.5	1.0	8.5	6.0	21.5	3.0
27	13.0	7.0	8.5	5.5	---	---	2.0	1.5	7.5	6.0	---	---
28	12.0	7.5	8.0	5.0	---	---	3.5	1.5	---	---	---	---
29	12.5	7.0	8.0	5.5	---	---	3.0	1.0	---	---	21.0	4.0
30	8.0	6.0	7.5	5.5	---	---	7.5	.5	---	---	16.5	5.5
31	10.0	5.5	---	---	---	---	8.5	2.0	---	---	16.5	4.5

09306242 CORRAL GULCH NEAR RANGELY, CO--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	9.5	4.5	16.5	7.0	21.5	6.5	23.5	11.5	22.5	14.0	21.0	11.0
2	14.5	3.0	21.5	6.0	21.5	7.0	22.5	11.0	23.0	13.0	20.5	11.5
3	15.5	2.5	16.0	7.0	22.5	7.5	22.5	9.0	23.0	13.0	20.0	11.0
4	15.0	2.5	12.0	5.5	23.5	10.5	22.0	10.0	22.5	12.5	20.0	11.0
5	17.5	3.5	12.0	4.0	17.5	7.0	23.0	10.5	23.0	12.0	21.5	11.0
6	19.5	5.0	14.0	4.0	24.0	10.0	23.0	11.0	23.0	12.5	21.5	12.0
7	20.0	4.5	17.0	2.0	24.5	11.0	23.5	11.5	21.0	13.0	21.5	13.0
8	19.5	5.5	17.0	5.5	24.0	11.5	23.0	11.0	23.5	13.5	20.0	12.0
9	12.0	2.5	---	---	22.5	9.5	23.5	11.5	22.0	13.0	21.0	12.0
10	18.5	2.5	---	---	22.0	10.5	23.5	12.5	22.5	13.0	20.0	12.0
11	21.5	7.0	---	---	22.5	10.0	23.0	13.0	21.0	13.5	18.5	12.0
12	21.5	3.5	23.0	9.0	23.0	9.0	24.5	12.5	22.5	14.5	18.0	10.0
13	17.5	6.0	24.0	9.0	23.0	9.5	25.0	11.5	22.0	14.5	19.0	9.0
14	20.5	6.0	24.0	9.0	22.0	10.5	24.5	12.0	21.0	13.0	15.0	10.0
15	18.5	5.5	23.0	10.0	22.5	10.5	21.5	12.5	21.5	11.0	19.5	12.0
16	19.0	4.0	23.0	8.5	22.5	12.5	23.0	12.5	20.5	11.0	16.0	13.0
17	11.0	3.0	19.0	8.5	23.0	10.5	23.5	13.5	20.5	11.0	19.0	11.5
18	18.5	3.0	19.0	8.0	22.5	10.0	24.5	12.5	20.0	10.5	15.5	9.5
19	19.5	4.0	22.0	7.0	22.5	11.0	23.5	13.5	20.0	9.5	13.5	9.5
20	21.0	4.5	23.0	6.5	24.0	10.0	23.5	14.0	20.0	11.0	15.5	9.5
21	13.0	4.5	19.0	10.0	24.0	12.0	23.5	13.5	20.0	10.5	18.0	9.5
22	18.5	4.0	21.0	7.5	24.0	12.0	24.0	12.0	19.0	11.0	18.5	9.0
23	19.5	4.5	18.0	6.5	21.5	12.0	24.5	12.0	20.0	9.5	19.5	9.5
24	23.0	6.0	19.0	5.5	23.0	13.0	25.0	12.0	19.5	8.0	17.5	10.0
25	17.5	6.5	17.0	5.5	22.0	13.0	25.0	13.0	19.0	9.5	19.5	10.5
26	18.5	5.5	19.0	5.5	22.5	11.5	24.5	13.0	21.0	11.0	19.5	12.5
27	16.0	6.5	17.5	6.0	22.5	12.0	24.0	13.0	21.0	9.5	19.0	11.5
28	18.5	5.5	20.0	7.0	21.5	12.5	22.5	13.5	20.5	11.0	19.0	11.0
29	19.0	7.5	20.5	6.0	20.5	12.0	24.0	14.5	21.5	11.0	18.5	10.5
30	19.0	8.0	22.5	7.0	22.5	12.0	23.5	14.0	21.5	11.5	18.5	10.0
31	---	---	20.5	7.0	---	---	21.5	13.0	20.0	11.5	---	---

09306242 CORRAL GULCH NEAR RANGELY, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	.35	---	.03	.31	---	.04	.31	31	.02
2	.35	---	.03	.31	---	.03	.35	28	.03
3	.31	---	.03	.31	---	.03	.31	19	.01
4	.31	---	.03	.27	35	.03	.31	11	.01
5	.35	---	.03	.27	58	.05	.31	4	.00
6	1.1	---	7.5	.31	154	.14	.35	23	.02
7	.59	---	14	.27	164	.12	.34	31	.02
8	.27	---	.10	.27	54	.04	.43	34	.03
9	.23	---	.09	.27	7	.00	.32	34	.03
10	.23	---	.08	.27	7	.00	.44	---	.07
11	.20	---	.07	.27	14	.01	.27	31	.02
12	.23	107	.07	.27	33	.02	.27	21	.01
13	.27	---	.06	.27	19	.01	.27	24	.02
14	.27	---	.05	.23	23	.01	.27	32	.02
15	.27	---	.05	.23	33	.02	.24	25	.02
16	.27	---	.04	.27	20	.01	.27	22	.02
17	.27	---	.03	.27	38	.02	.24	16	.01
18	.27	---	.03	.27	29	.02	.24	15	.01
19	.27	39	.02	.27	26	.02	.24	15	.01
20	.27	---	.02	.27	33	.02	.24	14	.01
21	.31	---	.02	.27	19	.01	.24	18	.01
22	.27	---	.02	.27	15	.01	.24	33	.02
23	.27	---	.02	.27	26	.02	.24	54	.04
24	.27	---	.02	.27	40	.03	.22	45	.03
25	.27	---	.02	.27	30	.02	.20	47	.03
26	.27	---	.01	.27	33	.02	.20	21	.01
27	.27	24	.02	.27	25	.02	.20	17	.01
28	.27	38	.03	.31	21	.01	.20	18	.01
29	.27	68	.05	.31	51	.04	.20	34	.02
30	.27	---	.05	.31	39	.03	.20	24	.02
31	.27	---	.04	---	---	---	.36	---	.10
TOTAL	9.69	---	22.66	8.30	---	0.85	8.52	---	0.69

09306242 CORRAL GULCH NEAR RANGELY, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JANUARY			FEBRUARY			MARCH	
1	1.0	---	1.0	.73	5950	11	.20	---	.14
2	.20	340	.26	.79	5760	12	.18	---	.11
3	.22	290	.19	.73	5410	12	.16	---	.08
4	.14	280	.09	.63	4390	8.9	.16	---	.06
5	.18	220	.09	.51	2450	3.0	.18	---	.10
6	.39	170	.19	.63	4050	7.7	.20	---	.13
7	.43	130	.13	.63	4370	7.1	1.1	4010	51
8	.77	200	.50	.64	4180	7.2	.51	160	.22
9	1.3	350	1.3	.63	4760	8.2	.55	170	.34
10	.18	160	.08	.59	4070	6.1	.55	70	.10
11	.16	53	.02	.51	3610	4.6	.39	80	.09
12	.18	34	.01	.51	3800	6.0	.43	60	.06
13	.18	---	.01	.54	2710	2.9	.55	30	.04
14	.18	---	.01	.49	3610	5.2	.47	40	.05
15	.18	---	.01	.49	2660	4.3	2.2	10400	118
16	.18	---	.01	.22	483	.31	2.8	11900	89
17	.20	---	.01	.24	545	.46	2.9	13100	98
18	.20	---	.01	.22	1390	1.7	3.3	15100	132
19	.20	---	.01	.43	3240	4.4	2.0	13600	72
20	.20	---	.01	.35	3180	2.5	1.8	11800	59
21	.20	---	.01	.39	2450	2.3	1.5	12000	56
22	.20	---	.01	.31	1920	2.2	1.9	14300	72
23	.20	---	.01	.14	130	.05	1.8	12800	65
24	.20	---	.01	.16	210	.07	1.5	9180	45
25	.20	---	.01	.16	100	.04	1.2	7890	27
26	1.0	230	.88	.20	---	.07	1.1	8700	27
27	1.2	340	1.1	.20	---	.10	1.0	6670	21
28	1.1	451	1.3	.18	---	.11	.73	2940	6.8
29	.93	1690	4.2	---	---	---	.70	3440	9.8
30	.68	3430	7.0	---	---	---	.46	1170	1.6
31	.59	4560	8.2	---	---	---	.81	2560	5.7
TOTAL	13.25	---	26.67	12.25	---	120.51	33.33	---	957.42

09306242 CURRAL GULCH NEAR RANGELY, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	1.2	3950	13	2.3	2440	17	3.2	---	29
2	1.2	3710	13	2.0	1490	8.2	2.8	---	24
3	1.2	3760	12	1.7	1280	6.7	2.8	---	18
4	1.4	4800	20	2.4	2420	16	3.3	2900	26
5	2.3	8660	53	2.8	2690	21	5.0	4350	82
6	2.0	7470	46	2.4	1590	11	4.8	---	48
7	2.2	5180	30	2.9	1490	12	4.4	---	34
8	2.3	4830	29	3.4	2010	19	3.7	1970	20
9	2.1	4360	27	3.4	2540	24	3.7	2720	27
10	2.2	4220	24	3.8	3740	42	4.0	2900	33
11	1.9	3790	20	5.0	5210	73	3.4	2150	20
12	2.1	5480	34	5.4	---	68	3.2	1480	13
13	2.7	5950	43	4.6	4210	53	3.5	1550	17
14	2.6	5190	37	4.2	---	44	5.4	3410	50
15	2.4	4300	29	4.3	3600	42	4.4	---	69
16	2.4	4130	28	4.8	3720	49	6.7	7720	143
17	2.4	4020	26	5.4	4030	61	4.7	4370	57
18	1.8	3680	20	5.0	4330	57	5.2	4120	58
19	2.1	5920	35	3.6	5220	52	4.9	2330	32
20	2.1	4730	29	3.8	4450	46	5.2	---	60
21	2.4	4550	31	3.7	4790	49	5.6	---	73
22	2.1	4110	25	3.0	3490	29	5.1	2730	39
23	2.0	4520	25	2.8	3270	25	4.9	3260	46
24	2.2	4420	30	3.0	2900	24	5.7	2980	46
25	2.1	3860	23	3.2	3300	29	5.8	2820	44
26	1.3	---	8.5	3.0	---	28	5.6	2790	42
27	1.8	2380	12	2.6	---	24	4.6	2460	31
28	2.1	3160	20	2.7	---	24	3.7	1900	19
29	3.0	3750	35	2.6	---	23	4.0	3360	36
30	4.1	4520	50	2.7	---	24	4.1	2490	28
31	---	---	---	2.9	---	24	---	---	---
TOTAL	63.7	---	827.5	105.4	---	1024.9	133.4	---	1264

09306242 CORRAL GULCH NEAR RANGELY, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JULY			AUGUST			SEPTEMBER	
1	4.2	2390	27	4.2	1690	18	3.2	117	.92
2	4.0	1770	20	4.2	1120	12	3.3	139	1.1
3	3.9	2030	22	3.9	949	10	3.2	115	.96
4	3.9	1750	19	4.0	1180	13	3.2	109	.94
5	4.0	1350	15	3.7	979	10	3.0	115	.94
6	3.8	1680	18	3.9	1020	11	3.2	246	2.1
7	3.7	1840	19	3.8	711	6.9	3.2	189	1.7
8	3.5	1220	12	3.4	703	7.2	3.5	192	1.7
9	3.6	925	9.5	3.4	764	7.7	3.4	---	1.7
10	3.8	1600	17	3.4	971	8.9	3.3	---	1.3
11	4.2	1940	23	3.0	667	6.0	3.6	---	2.4
12	4.1	1780	21	3.1	598	5.6	3.8	---	3.0
13	4.2	1180	13	3.2	1240	13	3.4	---	2.1
14	4.1	1040	12	3.7	1490	16	3.4	212	1.9
15	3.9	891	9.4	3.3	702	7.2	3.3	453	3.9
16	3.8	1110	12	3.1	554	4.8	3.7	256	2.6
17	3.8	703	7.5	3.1	---	3.4	3.8	305	3.0
18	3.9	1080	12	2.8	---	3.0	3.9	404	4.3
19	4.0	1370	16	3.1	---	3.4	3.8	394	4.0
20	4.0	1270	14	3.2	---	3.8	3.7	272	2.8
21	3.9	1840	20	3.0	---	3.3	3.5	342	3.3
22	3.8	1390	15	2.3	172	1.0	3.4	641	6.7
23	3.8	1340	14	2.0	105	.58	2.9	535	4.3
24	3.8	1920	20	2.1	189	1.1	3.0	322	2.6
25	3.7	1440	15	2.7	268	1.9	3.4	661	7.2
26	3.6	1440	15	3.2	348	2.9	4.0	787	8.8
27	3.7	1180	12	3.3	347	3.1	3.7	812	8.5
28	3.9	1440	15	3.3	138	1.2	3.0	524	4.8
29	4.0	958	11	3.4	194	1.8	3.0	957	7.7
30	4.1	970	11	3.2	133	1.0	2.9	866	6.6
31	3.9	1460	16	3.2	219	1.8	---	---	---
TOTAL	120.6	---	482.4	101.2	---	190.58	101.7	---	103.86
YEAR	711.34		5022.04						

USPENDED-SEDIMENT, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM (70335)	SED. SUSP. SIEVE DIAM. % FINER THAN 2.00 MM (70336)
FEB							
03...	1245	.83	6180	14	95	--	--
MAR							
01...	1410	.20	556	.30	98	--	--
07...	1630	6.9	52000	969	--	99	99
07...	1635	6.0	43800	710	--	--	--
15...	1730	4.0	20100	217	--	93	96
15...	1735	2.9	18400	144	81	--	--
17...	1245	2.5	13100	88	--	92	95
20...	1630	1.8	9600	47	8	--	--
20...	1635	1.8	8570	42	86	--	--
23...	1600	2.0	10400	56	75	--	--
23...	1605	2.0	11400	62	70	--	--
28...	1515	.68	2420	4.4	44	--	--
28...	1520	.68	1540	2.8	67	--	--
APR							
03...	1515	1.0	4670	13	--	98	98
JUN							
05...	1535	13	15600	548	90	--	--
05...	1545	13	16000	562	87	--	--

09306242 CORRAL GULCH NEAR RANGELY, CO--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SED. SUSP. FALL DIAM. % FINER THAN .002 MM (70337)	SED. SUSP. FALL DIAM. % FINER THAN .004 MM (70338)	SED. SUSP. FALL DIAM. % FINER THAN .062 MM (70342)	SED. SUSP. FALL DIAM. % FINER THAN .125 MM (70343)	SED. SUSP. FALL DIAM. % FINER THAN .250 MM (70344)	SED. SUSP. FALL DIAM. % FINER THAN .500 MM (70345)
FEB						
03...	--	--	--	--	--	--
MAR						
01...	--	--	--	--	--	--
07...	18	28	92	96	98	98
07...	18	32	73	90	94	98
15...	--	--	83	87	89	92
15...	--	--	--	--	--	--
17...	--	--	81	84	87	91
20...	--	--	--	--	--	--
20...	--	--	--	--	--	--
23...	--	--	--	--	--	--
23...	--	--	--	--	--	--
28...	--	--	--	--	--	--
28...	--	--	--	--	--	--
APR						
03...	--	--	96	98	98	--
JUN						
05...	--	--	--	--	--	--
05...	--	--	--	--	--	--

09306255 YELLOW CREEK NEAR WHITE RIVER, CO

LOCATION.--Lat 40°10'07", long 108°24'02", in NE¼SW¼ sec.4, T.2 N., R.98 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 160 ft (49 m) downstream from bridge on State Highway 64, 0.3 mi (0.5 km) upstream from mouth, and 10 mi (16 km) northwest of White River City.

DRAINAGE AREA.--262 mi^2 (679 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1972 to current year.

GAGE.--Water-stage recorder. Concrete control since Sept. 18, 1974. Altitude of gage is 5,535 ft (1,687 m), from topographic map.

REMARKS.--Records good except those for winter period, which are fair. Diversions for irrigation of about 300 acres (1.21 km^2) above station.

AVERAGE DISCHARGE.--6 years, 1.76 ft^3/s (0.050 m^3/s), 1,280 acre-ft/yr (1.58 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,800 ft^3/s (193 m^3/s) Sept. 7, 1978, gage height, 12.97 ft (3.953 m), from contracted opening and flow over road measurement of peak flow; no flow Sept. 7-16, 1978.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 25, 1965, reached a discharge of 1,050 ft^3/s (29.7 m^3/s) by slope-area measurement of peak flow.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,800 ft^3/s (193 m^3/s) at 1900 Sept. 7, gage height, 12.97 ft (3.953 m), from contracted opening and flow over road measurement of peak flow, only peak above base of 100 ft^3/s (2.8 m^3/s); no flow Sept. 7-16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.85	1.1	.48	.75	1.2	1.6	1.5	1.3	.94	.48	.31	.30
2	.85	1.2	.50	.68	1.2	1.6	1.5	1.2	.94	.50	.31	.30
3	.88	1.2	.56	.68	1.2	1.3	1.6	1.1	.94	.44	.25	.31
4	.91	1.2	.56	.70	1.2	1.8	1.5	1.2	.94	.42	.25	.29
5	.97	1.2	.54	.75	1.2	1.8	1.7	1.2	.94	.42	.25	.29
6	1.0	1.3	.52	.80	1.2	2.1	1.6	1.2	.95	.42	.25	.29
7	.94	1.3	.54	.90	1.2	2.0	1.5	1.2	.96	.41	.25	500
8	.97	1.2	.52	.90	1.3	2.0	1.4	1.2	.93	.41	.25	4.5
9	.97	1.0	.50	1.0	1.3	2.0	1.4	1.1	.92	.41	.24	1.1
10	1.0	.90	.52	1.0	1.4	2.0	1.5	1.1	.86	.42	.22	.48
11	.97	.90	.60	1.0	1.4	1.8	1.4	1.1	.84	.42	.21	.00
12	.88	.80	.60	1.1	1.3	1.9	1.4	1.0	.82	.42	.22	.00
13	.94	.80	.60	1.1	1.4	1.6	1.3	.97	.74	.39	.47	.00
14	.94	.70	.60	1.1	1.4	1.4	1.4	.97	.71	.39	.43	.00
15	.94	.70	.60	1.2	1.3	1.6	1.4	.94	.67	.39	.39	.00
16	.94	.62	.56	1.2	1.4	1.8	1.4	.94	.65	.41	.37	.00
17	.94	.60	.60	1.3	1.4	2.0	1.4	1.1	.65	.42	.32	.21
18	1.0	.60	.54	1.4	1.8	2.0	1.2	1.1	.64	.43	.32	.32
19	1.1	.56	.46	1.4	1.5	2.0	1.3	.97	.62	.41	.32	.34
20	1.1	.54	.40	1.3	1.4	1.9	1.3	.94	.62	.41	.32	.34
21	1.1	.50	.40	1.2	1.4	1.7	1.3	.94	.60	.40	.32	.32
22	1.1	.50	.40	1.0	1.5	2.0	1.4	.97	.59	.38	.32	.32
23	1.1	.50	.60	.95	1.7	1.7	1.2	.94	.58	.39	.34	.30
24	1.1	.50	.66	.70	1.8	2.6	1.2	.94	.55	.38	.33	.34
25	1.1	.54	.68	.65	1.6	1.9	1.2	.91	.55	.36	.30	.28
26	1.0	.54	.60	.60	1.4	1.7	1.2	.91	.52	.33	.31	.28
27	1.0	.50	.64	.90	1.6	1.6	1.3	.91	.48	.29	.30	.30
28	1.0	.50	.66	1.1	1.7	1.6	1.2	.91	.49	.29	.29	.28
29	1.1	.48	.72	1.1	---	1.4	1.3	.91	.50	.31	.29	.25
30	1.1	.50	.74	1.1	---	1.4	1.2	.91	.50	.30	.30	.26
31	1.1	---	.80	1.1	---	1.4	---	.91	---	.31	.30	---
TOTAL	30.89	23.48	17.70	30.86	39.4	55.2	41.2	31.99	21.64	12.16	9.35	512.00
MEAN	1.00	.78	.57	1.00	1.41	1.78	1.37	1.03	.72	.39	.30	17.1
MAX	1.1	1.3	.80	1.4	1.8	2.6	1.7	1.3	.96	.50	.47	500
MIN	.85	.48	.40	.65	1.2	1.3	1.2	.91	.48	.29	.21	.00
AC-FT	61	47	35	61	78	109	82	63	43	24	19	1020

CAL YR 1977 TOTAL 409.70 MEAN 1.12 MAX 13 MIN .37 AC-FT 813
WTR YR 1978 TOTAL 825.87 MEAN 2.26 MAX 500 MIN .00 AC-FT 1640

09306255 YELLOW CREEK NEAR WHITE RIVER, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1975 to current year.
WATER TEMPERATURE: April 1975 to current year.
SUSPENDED-SEDIMENT DISCHARGE: April 1974 to current year.

INSTRUMENTATION.--Water-quality monitor since April 1975. Pumping sediment sampler since April 1974.

REMARKS.--Daily water temperatures for 1977 water year revised.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 5,790 micromhos Sept. 17, 1978; minimum, 475 micromhos Sept. 17, 1976.
WATER TEMPERATURES: Maximum, 35.0°C July 25, 1978; minimum, freezing point on many days during winter months each year.
SEDIMENT CONCENTRATIONS: Maximum daily, 44,000 mg/L Sept. 7, 1978; minimum daily, no flow several days during September 1978.
SEDIMENT LOADS: Maximum daily, 290,000 tons (263,000 t) Sept. 7, 1978; minimum daily, no flow several days during September 1978.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 5,790 micromhos Sept. 17; minimum, 1,890 micromhos Mar. 11.
WATER TEMPERATURES: Maximum, 35.0°C July 25; minimum, freezing point on many days during November to February.
SEDIMENT CONCENTRATIONS: Maximum daily 44,000 mg/L Sept. 7; minimum daily, no flow several days during September.
SEDIMENT LOADS: Maximum daily, 290,000 tons (263,000 t) Sept. 7; minimum daily, no flow several days during September.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)
OCT 18...	0930	.99	4200	9.0	3.5	12	10.8	20	--	--
DEC 28...	0930	.93	4250	8.4	.5	--	--	--	--	--
MAR 27...	1330	1.6	3800	8.9	21.0	10	7.4	39	--	--
JUN 15...	0900	.67	4300	7.6	16.5	--	12.6	--	--	--
SEP 26...	0915	.28	4100	8.6	10.0	34	9.0	63	1.4	1500

DATE	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)
OCT 18...	610	0	28	130	850	15	4.3	1810	210
DEC 28...	580	0	35	120	900	16	5.0	1910	94
MAR 27...	670	0	35	140	830	14	5.2	1830	58
JUN 15...	540	--	17	120	970	18	5.7	--	3
SEP 26...	510	--	39	99	860	17	6.7	--	--

09306255 YELLOW CREEK NEAR WHITE RIVER, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	BROMIDE DISSOLVED (MG/L AS BR)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER DAY)	SOLIDS, RESIDUE AT 105 DEG. C, DISSOLVED (MG/L)
OCT 18...	1830	560	140	.8	2.2	8.4	2830	7.56	2800
DEC 28...	1720	570	170	--	1.4	13	2850	7.16	--
MAR 27...	1600	580	120	.4	2.2	12	2690	11.6	2800
JUN 15...	--	570	180	--	2.7	1.8	--	--	--
SEP 26...	1470	590	220	.1	2.1	12	--	--	--

DATE	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C)
OCT 18...	30	.20	.00	.62	.62	.02	.00	8.1	2.0
DEC 28...	--	--	--	--	--	--	--	7.5	--
MAR 27...	360	.62	.04	1.3	1.3	.21	.07	8.7	3.0
JUN 15...	--	--	--	--	--	--	--	12	--
SEP 26...	--	.01	.00	.76	.76	.06	.02	15	--

DATE	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, DISSOLVED (UG/L AS BE)	BORON, DISSOLVED (UG/L AS B)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)
OCT 18...	0	4	100	0	730	1	10	1	70	8
MAR 27...	0	5	400	0	670	0	0	4	20	2
SEP 26...	10	8	100	0	960	2	0	1	40	10

DATE	LITHIUM DISSOLVED (UG/L AS LI)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	STRONTIUM, DISSOLVED (UG/L AS SR)	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, DISSOLVED (UG/L AS ZN)	GROSS ALPHA, DISSOLVED (UG/L AS U-NAT)
OCT 18...	190	10	.0	16	0	1	3700	6.9	10	<41
MAR 27...	170	20	.0	23	0	5	3600	7.0	0	<33
SEP 26...	150	30	.0	26	0	0	2400	5.0	10	<8.6

09306255 YELLOW CREEK NEAR WHITE RIVER, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DIS-SOLVED, RADON METHOD (PCI/L)	URANIUM NATURAL DIS-SOLVED (UG/L AS U)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)	OIL AND GREASE (MG/L)
OCT 18...	<.6	11	.7	9.2	.6	.18	3.6	.00	0	0
MAR 27...	22	9.6	12	8.4	11	.16	5.1	.00	0	0
SEP 26...	29	<4.1	16	<3.8	15	.10	--	.00	1	0

DATE	TIME	ALDRIN, TOTAL (UG/L)	CHLOR-DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DI-AZINON, TOTAL (UG/L)	DI-ELDRIN TOTAL (UG/L)	ENDO-SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	ETHION, TOTAL (UG/L)
OCT 18...	0930	.00	.0	.00	.00	.00	.00	.00	.00	.00	.00
MAR 27...	1330	.00	.0	.00	.00	.00	.00	.00	.00	.00	.00
SEP 26...	0915	.00	.0	.00	.00	.00	.00	.00	.00	.00	.00

DATE	HEPTA-CHLOR, TOTAL (UG/L)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MALA-THION, TOTAL (UG/L)	METHYL PARA-THION, TOTAL (UG/L)	METHYL TRI-THION, TOTAL (UG/L)	PARA-THION, TOTAL (UG/L)	TOX-APHENE, TOTAL (UG/L)	TOTAL TRI-THION (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)
OCT 18...	.00	.00	.00	.00	.00	.00	.00	0	.00	.00	.00
MAR 27...	.00	.00	.00	.00	.00	.00	.00	0	.00	.00	.00
SEP 26...	.00	.00	.00	.00	.00	.00	.00	0	.00	.00	.00

09306255 YELLOW CREEK NEAR WHITE RIVER, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4350	3910	4100	4400	4050	3330	3780	3730	4710	4330	4320	4540
2	4460	---	4070	4720	4010	3400	3540	3980	4720	4560	4430	4510
3	4540	---	4070	4480	3980	3600	3780	4040	4690	4580	4450	4380
4	4610	---	4060	4310	3970	3650	---	4020	4670	4510	4370	4280
5	4630	---	4010	4180	4000	3100	---	3840	4660	4270	4370	4270
6	4640	---	4190	4340	3890	2970	---	3850	4210	4220	4250	4380
7	4620	---	4010	4200	3910	3080	---	3810	4240	4460	4210	---
8	4340	---	3820	4230	3890	3330	---	3910	4310	4520	4200	2000
9	4080	---	3800	4040	3970	3130	---	4030	4360	4480	4200	---
10	4130	3790	---	4230	3780	2420	3710	4140	4410	4430	4410	---
11	4220	3790	---	4130	3800	2380	3640	4200	4350	4420	4320	---
12	4240	---	---	3840	4000	2380	3670	4230	4350	4510	4280	---
13	4270	---	---	4190	4110	2670	3770	4290	4350	4600	4250	---
14	4160	---	---	4240	4100	3470	3370	4340	4150	4550	4660	---
15	4070	---	---	4160	3820	3780	3670	4450	4100	4480	4670	---
16	3930	3830	---	4160	3850	3670	3640	---	4000	4440	4610	---
17	3900	3790	---	4090	4120	3370	3670	---	4000	4500	5000	---
18	3930	3750	---	4140	4350	3220	3670	---	3900	4510	4500	2890
19	4060	---	---	4140	3780	3550	3600	4570	4200	4510	4800	3890
20	4110	---	---	4020	4080	3540	3010	4640	3950	4510	4600	3860
21	4070	---	---	3950	4220	3550	3270	4550	4080	4580	4600	3890
22	3840	---	---	3950	4300	3740	3580	4560	4390	4550	4690	4000
23	3630	---	---	3890	3820	3560	3660	4630	4390	4560	4500	4020
24	3700	---	---	4100	3240	3420	3800	4710	4490	4540	4230	4090
25	3750	---	---	4130	3260	3710	4170	4700	4500	4460	4500	---
26	3830	---	---	4020	3350	3820	4000	4660	4430	4470	4500	4120
27	3920	---	---	3980	3860	4000	3810	4650	4470	4450	4500	4080
28	3850	---	---	4200	3320	3850	3870	---	4410	4370	4500	4130
29	3740	---	4070	3990	---	3940	3780	4710	4310	4400	4500	4150
30	4370	---	4020	3990	---	3920	3880	4750	4320	4540	4440	4140
31	4200	---	4130	4020	---	3890	---	4760	---	4440	4460	---

09306255 YELLOW CREEK NEAR WHITE RIVER, CO--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	24.0	8.0	8.5	1.0	.5	.0	1.0	.5	1.0	.5	5.5	2.0
2	23.5	7.0	---	---	3.5	.5	1.0	.5	1.0	.5	6.0	1.0
3	23.5	9.5	---	---	6.5	2.5	.5	.5	1.0	1.0	2.5	.5
4	23.5	9.0	---	---	7.5	2.0	1.0	.5	.5	1.0	5.5	.5
5	23.0	13.0	---	---	6.0	.5	1.5	.5	1.0	.5	7.0	1.5
6	21.5	13.0	---	---	.5	.5	3.5	.5	4.0	.5	9.0	2.0
7	22.0	9.5	---	---	1.0	.5	2.5	.5	5.5	2.0	11.0	2.5
8	21.0	6.0	---	---	2.0	.5	1.5	.5	6.0	1.0	11.0	1.5
9	18.0	5.0	---	---	.5	.0	2.0	.5	2.5	.5	12.0	1.5
10	13.0	4.5	1.0	.5	.5	.0	2.5	1.0	5.0	2.0	14.0	2.5
11	17.0	2.5	3.5	.5	.5	.0	2.5	1.5	4.5	1.0	11.5	1.0
12	16.5	2.5	---	---	.5	.0	2.5	1.5	4.5	.0	8.0	4.0
13	18.0	2.5	---	---	.5	.0	3.0	.5	4.0	.0	9.0	3.0
14	18.5	2.0	---	---	3.5	.5	2.0	.5	7.0	.5	10.0	1.0
15	19.0	3.0	9.0	.0	6.0	.5	2.5	.5	5.5	.5	9.0	.5
16	18.5	3.0	10.0	.5	2.5	.5	2.5	.5	6.0	.0	11.5	1.0
17	18.0	2.0	8.5	1.5	.5	.5	3.5	.5	2.0	.5	12.5	1.0
18	16.0	4.5	9.0	2.5	.0	.0	3.0	.5	1.0	.0	13.5	1.5
19	15.5	.5	---	---	.0	.0	2.0	.5	1.0	.0	9.5	3.0
20	16.0	3.5	---	---	.5	.0	3.0	.5	2.5	.0	15.0	3.0
21	13.5	6.0	---	---	.5	.5	3.5	1.0	6.5	.0	13.5	3.5
22	15.5	3.0	---	---	.5	.5	3.0	.5	4.5	.0	8.5	6.0
23	15.0	.5	---	---	.5	.5	2.5	.5	5.0	.0	14.0	4.5
24	13.0	1.0	---	---	.5	.5	1.0	.5	5.5	.0	13.5	1.0
25	15.5	1.0	---	---	.5	.5	1.0	.5	7.5	.0	17.0	1.0
26	15.0	1.0	---	---	.5	.5	1.0	1.0	8.0	1.5	16.0	2.5
27	15.5	1.5	---	---	.5	.5	4.0	1.0	6.5	1.0	21.5	5.0
28	16.5	2.5	---	---	1.0	.5	1.0	1.0	9.5	.5	21.5	3.0
29	13.0	3.5	---	---	1.0	.5	1.0	1.0	---	---	22.5	2.5
30	14.5	5.0	---	---	1.0	.5	1.0	.5	---	---	20.5	3.5
31	5.5	1.0	---	---	1.5	.5	1.0	.5	---	---	22.5	6.5

09306255 YELLOW CREEK NEAR WHITE RIVER, CO--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	15.0	7.5	22.5	6.0	23.0	5.0	31.0	12.5	29.5	16.0	26.5	7.5
2	20.0	7.0	24.0	6.0	23.0	5.0	29.0	9.5	29.5	15.5	29.0	8.0
3	17.5	4.5	23.5	9.0	23.0	8.0	28.5	9.5	32.5	14.5	30.0	9.0
4	---	---	8.5	5.0	23.0	10.0	28.5	8.5	32.0	12.0	29.5	9.0
5	---	---	18.0	5.0	23.0	11.0	30.5	9.0	32.0	10.0	30.0	9.0
6	---	---	17.0	5.0	31.0	15.5	30.0	11.5	31.5	11.5	28.5	11.0
7	---	---	15.0	4.5	24.5	10.0	32.0	11.5	---	---	---	---
8	---	---	21.5	5.5	30.0	9.5	30.5	12.0	---	---	---	---
9	---	---	24.0	3.0	28.5	9.5	30.5	11.0	---	---	---	---
10	16.5	5.5	21.0	6.5	28.5	12.0	28.5	13.0	32.5	15.5	---	---
11	22.0	3.0	21.0	8.0	29.5	12.5	28.5	16.0	31.5	14.0	---	---
12	22.5	2.5	24.0	5.5	30.0	9.0	32.0	15.0	29.5	17.0	---	---
13	17.0	5.0	24.0	5.5	31.0	9.5	31.5	10.5	24.5	17.5	---	---
14	20.5	5.0	24.5	7.0	28.0	10.0	34.5	12.5	23.5	13.0	---	---
15	18.0	6.0	24.0	8.5	30.0	11.5	27.5	13.5	26.5	8.0	---	---
16	19.0	3.0	---	---	30.0	10.5	30.5	15.5	25.5	9.5	---	---
17	16.0	2.5	---	---	31.5	11.5	31.0	17.5	---	---	23.0	8.5
18	21.0	1.5	---	---	29.5	8.5	32.0	16.0	---	---	15.5	5.0
19	22.0	2.0	24.5	7.5	29.0	12.0	31.5	18.0	---	---	15.5	5.0
20	22.5	1.5	24.0	13.0	31.5	9.0	32.0	19.0	---	---	21.0	1.0
21	10.0	3.0	19.0	7.0	25.5	10.0	32.0	18.0	24.0	---	24.0	5.0
22	19.5	1.5	23.0	8.0	28.5	14.0	34.0	13.5	25.0	15.5	24.0	6.0
23	21.0	1.5	19.0	6.0	30.5	15.5	30.5	11.0	26.5	13.0	25.0	8.5
24	24.0	2.5	23.0	5.0	29.5	18.0	26.0	11.5	27.5	8.5	24.5	7.0
25	20.0	6.5	22.0	5.0	27.0	16.5	35.0	13.0	24.5	8.0	---	---
26	22.0	5.0	23.0	7.0	31.0	15.0	33.5	14.5	29.0	8.5	24.5	11.5
27	16.5	8.0	23.0	8.0	33.0	15.0	34.0	14.0	27.5	7.5	23.0	6.5
28	21.5	7.0	---	---	25.0	13.5	29.5	18.0	28.5	7.0	22.0	7.5
29	23.0	8.0	23.0	6.0	28.0	13.5	31.5	18.5	29.0	7.0	23.0	7.5
30	18.5	6.5	23.0	8.0	32.0	13.5	32.5	17.5	27.5	7.0	22.0	5.0
31	---	---	23.0	7.0	---	---	26.5	15.0	26.0	10.5	---	---

09306255 YELLOW CREEK NEAR WHITE RIVER, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	.85	99	.23	1.1	---	.60	.48	---	.10
2	.85	81	.19	1.2	175	.57	.50	---	.25
3	.88	58	.14	1.2	---	1.0	.56	---	.35
4	.91	70	.17	1.2	---	.70	.56	---	.35
5	.97	55	.14	1.2	---	.80	.54	220	.32
6	1.0	70	.19	1.3	---	.80	.52	---	.30
7	.94	65	.16	1.3	---	.70	.54	---	.30
8	.97	54	.14	1.2	---	.60	.52	---	.20
9	.97	64	.17	1.0	---	.50	.50	---	.10
10	1.0	60	.16	.90	188	.46	.52	---	.10
11	.97	63	.16	.90	---	.40	.60	---	.15
12	.88	58	.14	.80	---	.40	.60	---	.15
13	.94	---	.17	.80	---	.35	.60	72	.12
14	.94	40	.10	.70	---	.35	.60	---	.15
15	.94	---	.07	.70	---	.35	.60	---	.15
16	.94	---	.07	.62	210	.35	.56	---	.10
17	.94	---	.07	.60	---	.25	.60	---	.15
18	1.0	26	.07	.60	---	.25	.54	---	.10
19	1.1	34	.10	.56	---	.20	.46	---	.10
20	1.1	28	.08	.54	---	.15	.40	---	.05
21	1.1	---	.08	.50	50	.07	.40	---	.05
22	1.1	---	.09	.50	---	.07	.40	---	.05
23	1.1	---	.12	.50	---	.07	.60	---	.10
24	1.1	---	.14	.50	---	.07	.66	---	.15
25	1.1	55	.17	.54	---	.09	.68	---	.15
26	1.0	---	.15	.54	---	.09	.60	---	.10
27	1.0	---	.15	.50	---	.07	.64	---	.10
28	1.0	---	.15	.50	---	.07	.66	64	.11
29	1.1	---	.25	.48	---	.06	.72	60	.12
30	1.1	---	.30	.50	---	.10	.74	52	.10
31	1.1	---	.30	---	---	---	.80	52	.11
TOTAL	30.89	---	4.62	23.48	---	10.54	17.70	---	4.73

09306255 YELLOW CREEK NEAR WHITE RIVER, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JANUARY			FEBRUARY			MARCH	
1	.75	---	.15	1.2	300	.97	1.6	1700	7.7
2	.68	---	.15	1.2	316	1.0	1.6	1200	5.0
3	.68	---	.15	1.2	228	.74	1.3	1630	7.3
4	.70	---	.15	1.2	356	1.2	1.8	2250	14
5	.75	---	.20	1.2	436	1.4	1.8	---	19
6	.80	112	.24	1.2	444	1.4	2.1	4640	25
7	.90	---	.25	1.2	880	2.9	2.0	4480	25
8	.90	---	.25	1.3	848	3.0	2.0	2990	18
9	1.0	---	.30	1.3	652	2.3	2.0	---	21
10	1.0	---	.30	1.4	328	1.2	2.0	2160	13
11	1.0	---	.30	1.4	880	3.3	1.8	2350	12
12	1.1	---	.35	1.3	1240	4.4	1.9	2610	15
13	1.1	120	.36	1.4	800	3.0	1.6	2350	11
14	1.1	---	.35	1.4	360	1.4	1.4	843	3.1
15	1.2	---	.40	1.3	400	1.4	1.6	2160	12
16	1.2	---	.40	1.4	---	2.8	1.8	2300	11
17	1.3	---	.45	1.4	---	4.5	2.0	2300	13
18	1.4	128	.47	1.8	---	11	2.0	2380	15
19	1.4	---	.45	1.5	---	7.0	2.0	2610	13
20	1.3	---	.45	1.4	---	5.8	1.9	3450	16
21	1.2	---	.40	1.4	---	7.1	1.7	4120	19
22	1.0	---	.30	1.5	---	8.3	2.0	8520	47
23	.95	---	.30	1.7	---	8.6	1.7	3330	17
24	.70	---	.25	1.8	---	8.5	2.6	7700	79
25	.65	---	.20	1.6	---	5.3	1.9	729	3.5
26	.80	---	.50	1.4	---	1.7	1.7	1100	4.8
27	.90	365	.89	1.6	720	3.1	1.6	905	3.9
28	1.1	---	.90	1.7	1350	6.3	1.6	---	3.9
29	1.1	---	.90	---	---	---	1.4	---	3.9
30	1.1	---	.95	---	---	---	1.4	---	3.5
31	1.1	340	1.0	---	---	---	1.4	---	3.0
TOTAL	30.86	---	12.71	39.4	---	109.61	55.2	---	404.6

09306255 YELLOW CREEK NEAR WHITE RIVER, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	1.5	---	2.1	1.3	---	.45	.94	20	.05
2	1.5	---	2.1	1.2	98	.33	.94	20	.05
3	1.6	---	2.3	1.1	---	.25	.94	15	.04
4	1.5	315	1.3	1.2	82	.27	.94	20	.05
5	1.7	630	2.9	1.2	79	.26	.94	30	.08
6	1.6	270	1.1	1.2	82	.26	.95	25	.06
7	1.5	---	1.3	1.2	132	.43	.96	25	.06
8	1.4	---	1.2	1.2	120	.39	.93	25	.06
9	1.4	---	1.2	1.1	---	.20	.92	20	.05
10	1.5	308	1.2	1.1	---	.20	.86	50	.01
11	1.4	---	1.2	1.1	---	.20	.84	38	.09
12	1.4	---	1.2	1.0	---	.15	.82	---	.08
13	1.3	---	1.2	.97	---	.12	.74	34	.07
14	1.4	---	1.2	.97	---	.12	.71	42	.08
15	1.4	---	1.2	.94	---	.11	.67	56	.10
16	1.4	---	1.2	.94	42	.11	.65	15	.03
17	1.4	---	1.2	1.1	---	.40	.65	25	.04
18	1.2	---	4.0	1.1	---	.25	.64	20	.04
19	1.3	818	2.9	.97	55	.14	.62	15	.02
20	1.3	---	1.3	.94	35	.08	.62	35	.06
21	1.3	423	1.5	.94	30	.08	.60	15	.02
22	1.4	1180	4.3	.97	25	.06	.59	25	.04
23	1.2	624	2.0	.94	25	.06	.58	25	.04
24	1.2	---	.65	.94	25	.06	.55	12	.02
25	1.2	---	.65	.91	45	.11	.55	15	.02
26	1.2	260	.84	.91	30	.07	.52	27	.04
27	1.3	---	.70	.91	35	.08	.48	20	.03
28	1.2	---	.65	.91	35	.08	.49	28	.04
29	1.3	---	1.0	.91	30	.07	.50	25	.03
30	1.2	---	.65	.91	30	.07	.50	25	.03
31	---	---	---	.91	35	.08	---	---	---
TOTAL	41.2	---	46.24	31.99	---	5.54	21.64	---	1.43

09306255 YELLOW CREEK NEAR WHITE RIVER, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JULY			AUGUST			SEPTEMBER	
1	.48	35	.04	.31	30	.02	.30	30	.02
2	.50	40	.05	.31	30	.02	.30	30	.02
3	.44	25	.03	.25	35	.02	.31	42	.04
4	.42	---	.03	.25	30	.02	.29	30	.02
5	.42	20	.02	.25	30	.02	.29	28	.02
6	.42	50	.06	.25	30	.02	.29	35	.03
7	.41	85	.09	.25	25	.02	500	44000	290000
8	.41	30	.03	.25	35	.02	4.5	10000	122
9	.41	35	.04	.24	50	.03	1.1	---	5.0
10	.42	45	.05	.22	12	.01	.48	---	.10
11	.42	35	.04	.21	16	.01	.00	---	.0
12	.42	45	.05	.22	19	.01	.00	---	.0
13	.39	35	.04	.47	315	.56	.00	---	.0
14	.39	60	.06	.43	---	.10	.00	---	.0
15	.39	20	.02	.39	---	.05	.00	---	.0
16	.41	35	.04	.37	---	.05	.00	---	.0
17	.42	25	.03	.32	---	.06	.21	---	.03
18	.43	30	.03	.32	---	.03	.32	58	.05
19	.41	35	.04	.32	---	.02	.34	51	.05
20	.41	30	.03	.32	---	.02	.34	61	.06
21	.40	35	.04	.32	19	.02	.32	45	.04
22	.38	20	.02	.32	17	.01	.32	48	.04
23	.39	40	.04	.34	68	.06	.30	52	.04
24	.38	45	.05	.33	52	.05	.34	32	.03
25	.36	20	.02	.30	56	.04	.28	33	.02
26	.33	20	.02	.31	66	.06	.28	39	.03
27	.29	10	.01	.30	50	.04	.30	47	.04
28	.29	50	.04	.29	39	.03	.28	46	.03
29	.31	20	.02	.29	56	.04	.25	38	.02
30	.30	40	.03	.30	56	.04	.26	34	.02
31	.31	35	.03	.30	42	.03	---	---	---
TOTAL	12.16	---	1.14	9.35	---	1.53	512.00	---	290127.4
YEAR	825.87		290790.09						

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM (70332)	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM (70333)	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM (70334)	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM (70335)	SED. SUSP. SIEVE DIAM. % FINER THAN 2.00 MM (70336)
FEB										
27...	1125	1.6	334	1.4	87	--	--	--	--	--
27...	1130	1.6	326	1.4	90	--	--	--	--	--
MAR										
10...	1025	2.1	389	2.2	81	--	--	--	--	--
10...	1030	2.1	391	2.2	79	--	--	--	--	--
22...	1645	1.9	12900	68	97	99	99	97	98	98
SEP										
07...	1140	203	52100	28600	95	--	--	--	--	--

09306300 WHITE RIVER ABOVE RANGELY, CO

LOCATION.--Lat 40°06'26", long 108°42'44", in SW¼SE¼ sec.27, T.2 N., R.101 W., Rio Blanco County, Hydrologic Unit 14050007, on left bank 80 ft (24 m) upstream from Taylor Draw and 4.7 mi (7.6 km) east of Rangely.

DRAINAGE AREA.--2,790 mi² (7,230 km²), approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1972 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,270 ft (1,606 m), from topographic map.

REMARKS.--Records good except those for winter period or periods of no gage-height or doubtful gage-height record, which are poor. Diversions above station for irrigation of about 31,900 acres (129 km²).

AVERAGE DISCHARGE.--6 years, 634 ft^3/s (17.95 m^3/s), 459,300 acre-ft/yr (566 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,260 ft^3/s (121 m^3/s) June 9, 1975, gage height, 7.02 ft (2.140 m); maximum gage height, 8.68 ft (2.646 m) Jan. 19, 1977 (backwater from ice); minimum daily discharge, 62 ft^3/s (1.75 m^3/s) July 13, 14, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,800 ft3/s (79 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
June 17	1200	*3,940	112	6.92	2.109	Sept. 8	0100	3,770	107	6.71	2.045

Minimum daily discharge, 237 ft^3/s (6.71 m^3/s) Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	237	353	298	379	358	363	452	758	2120	2440	441	317
2	243	351	277	380	355	363	578	729	1980	2240	458	325
3	249	349	284	375	351	356	571	715	2050	2050	458	333
4	246	346	284	369	350	347	545	818	2080	1880	436	329
5	243	341	284	369	349	338	491	870	2290	1650	436	321
6	252	339	284	371	348	323	509	870	2220	1470	441	313
7	361	335	270	383	346	337	491	772	2130	1330	426	401
8	345	331	266	398	343	317	441	729	2200	1250	426	1650
9	325	329	264	400	348	313	468	673	2220	1120	426	412
10	291	326	270	399	351	333	480	673	2520	1030	430	365
11	305	321	262	392	355	345	468	736	2960	1050	426	353
12	302	319	261	389	360	345	452	765	3280	1080	421	357
13	309	318	261	388	363	345	446	750	3270	985	452	369
14	329	314	261	388	369	333	463	825	3310	892	446	365
15	337	292	261	390	372	294	468	1220	3510	810	497	365
16	329	274	261	389	378	280	474	1670	3610	758	515	373
17	349	274	260	387	380	277	485	1630	3740	758	441	377
18	349	270	246	389	381	294	497	1580	3610	878	412	385
19	329	277	253	391	381	373	463	1500	3340	878	416	436
20	329	280	263	391	378	436	446	1460	3190	780	421	446
21	329	281	273	383	372	458	446	1550	2990	715	412	452
22	361	282	285	373	370	426	446	1660	2970	673	403	436
23	381	283	297	371	375	533	441	2040	3040	631	390	426
24	349	285	308	371	376	624	426	2370	3130	610	365	421
25	426	288	318	371	370	631	416	2560	3230	578	357	421
26	385	289	330	369	362	394	463	2340	3430	509	369	421
27	377	290	342	368	359	361	552	2130	3090	480	365	426
28	370	291	358	366	359	357	736	2130	2740	452	369	408
29	368	292	371	362	---	365	708	1930	2720	446	365	403
30	361	293	378	360	---	369	750	2030	2550	452	341	408
31	359	---	378	359	---	398	---	2180	---	463	325	---
TOTAL	10125	9213	9008	11770	10159	11630	15072	42663	85520	31338	12886	12814
MEAN	327	307	291	380	363	375	502	1376	2851	1011	416	427
MAX	426	353	378	400	381	631	750	2560	3740	2440	515	1650
MIN	237	270	246	359	343	277	416	673	1980	446	325	313
AC-FT	20080	18270	17870	23350	20150	23070	29900	84620	169600	62160	25560	25420

CAL YR 1977 TOTAL 109366 MEAN 300 MAX 687 MIN 62 AC-FT 216900
WTR YR 1978 TOTAL 262198 MEAN 718 MAX 3740 MIN 237 AC-FT 520100

09306300 WHITE RIVER ABOVE RANGELY, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1975 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO
OCT 07...	1700	368	950	8.3	14.0	7.6	350	120	83	35	100	2.3
NOV 14...	1700	314	815	8.1	4.0	11.2	310	110	80	26	62	1.5
DEC 12...	1530	384	810	8.1	1.0	11.8	290	110	76	25	62	1.6
JAN 12...	1530	429	760	8.1	.0	12.2	270	100	71	23	62	1.6
FEB 08...	1500	343	780	8.4	.0	13.4	280	82	72	24	60	1.6
MAR 08...	1200	305	974	8.4	5.5	10.4	320	99	77	31	99	2.4
APR 06...	1500	643	815	8.1	11.0	9.2	280	90	67	27	69	1.8
MAY 09...	1530	779	600	8.1	13.5	9.2	230	77	60	20	40	1.1
JUN 08...	1330	E2450	360	8.0	14.0	9.2	160	42	43	12	15	.5
JUL 11...	1400	E1180	460	8.3	20.0	7.7	200	69	54	16	22	.7
AUG 16...	1400	518	710	8.4	19.0	8.6	280	89	71	24	50	1.3
SEP 19...	1230	E412	775	8.4	10.0	9.2	300	110	82	24	47	1.2

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)
OCT 07...	2.8	280	0	230	260	62	.4	13	694	.05	.03	1.6
NOV 14...	1.7	240	0	200	180	44	.3	14	526	.02	.01	.16
DEC 12...	1.7	230	0	190	160	41	.3	15	496	.03	.08	.92
JAN 12...	1.6	210	0	170	170	44	.4	14	490	.10	.09	.16
FEB 08...	1.9	240	0	200	160	44	.3	13	494	.04	.04	.25
MAR 08...	2.7	270	0	221	220	46	.4	12	621	.08	.02	1.6
APR 06...	2.4	230	0	190	180	35	.3	13	507	.33	.03	2.5
MAY 09...	1.7	190	0	160	120	21	.2	12	369	.05	.01	.57
JUN 08...	1.2	140	0	110	59	7.8	.1	12	219	.14	.01	.50
JUL 11...	1.4	160	0	130	78	18	.1	14	282	.03	.01	.39
AUG 16...	2.3	220	4	190	150	30	.3	17	457	.01	.00	.54
SEP 19...	2.0	240	0	200	160	35	.3	15	484	.03	.01	1.5

E ESTIMATED.

09306300 WHITE RIVER ABOVE RANGELY, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	BORON, DISSOLVED (UG/L AS B)	IRON, DISSOLVED (UG/L AS FE)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	PERIPHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	PERIPHYTON BIOMASS ASH WEIGHT G/SQ M	CHLOR-A PERIPHYTON CHROMOGRAPHIC FLUOROM (MG/M2)	CHLOR-B PERIPHYTON CHROMOGRAPHIC FLUOROM (MG/M2)
OCT 07...	1.6	1.7	.66	90	40	13	4.4	--	--	--	--
NOV 14...	.17	.19	.06	60	20	2.4	1.9	--	--	--	--
DEC 12...	1.0	1.0	.21	60	20	5.9	2.2	--	--	--	--
JAN 12...	.25	.35	.06	50	40	1.9	1.2	--	--	--	--
FEB 08...	.29	.33	.11	60	30	4.5	2.3	--	--	--	--
MAR 08...	1.6	1.7	.63	70	60	13	3.1	--	--	--	--
APR 06...	2.5	2.8	.90	110	30	17	2.9	--	--	--	--
MAY 09...	.58	.63	.18	40	20	2.8	3.2	--	--	--	--
JUN 08...	.51	.65	.14	20	90	7.3	3.4	--	--	--	--
JUL 11...	.40	.43	.08	40	30	3.7	2.9	--	--	--	--
AUG 16...	.54	.55	.06	70	30	5.0	3.8	1.81	.866	.170	.000
SEP 19...	1.5	1.5	.13	90	50	--	9.7	--	--	--	--

DATE	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BERYLLIUM, DISSOLVED (UG/L AS BE)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)
DEC 12...	540	0	2	2	200	100	0	0	0	0	0	0
MAY 09...	3000	0	2	1	100	0	0	0	1	1	10	20

DATE	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	LITHIUM TOTAL RECOVERABLE (UG/L AS LI)	LITHIUM DISSOLVED (UG/L AS LI)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)
DEC 12...	1	0	12	2	4	0	20	20	80	0	.0	.0
MAY 09...	3	0	6	0	6	3	10	8	130	20	.0	.0

DATE	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	STRONTIUM, TOTAL RECOVERABLE (UG/L AS SR)	STRONTIUM, DISSOLVED (UG/L AS SR)	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)	CYANIDE TOTAL (MG/L AS CN)
DEC 12...	2	1	14	0	1	1	910	1000	1.8	40	0	.00
MAY 09...	2	0	4	2	1	1	650	670	2.0	30	10	.00

09306300 WHITE RIVER ABOVE RANGELY, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT				
08...	1500	426	128	147
29...	1430	380	60	62
NOV				
18...	1330	381	53	55
DEC				
02...	1500	452	204	249
20...	1430	361	104	101
JAN				
14...	1130	133	31	11
31...	1430	280	110	83
FEB				
08...	1300	303	101	83
08...	1330	313	101	85
25...	1300	335	130	118
MAR				
01...	1330	617	238	396
23...	1500	408	457	503
APR				
07...	1230	373	91	92
14...	1230	403	107	116
MAY				
04...	1045	610	349	575
12...	1315	430	102	118
17...	1330	430	92	107
MAY				
23...	1500	321	30	26
JUN				
01...	1215	631	134	228
07...	1330	485	184	241
15...	1430	246	48	32
23...	1145	208	60	34
30...	1430	105	20	5.7
JUL				
08...	1130	188	725	368
15...	1040	195	266	140
20...	1200	105	2910	825
27...	1200	157	847	359
AUG				
04...	1030	198	123	66
10...	1130	234	112	71
17...	1200	127	97	33
24...	1600	249	355	239
30...	1130	317	525	449
SEP				
06...	1245	284	504	386
13...	1515	274	676	500
20...	1600	270	183	133
27...	1020	267	138	99

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT					
07...	1335	368	1280	1270	--
07...	1700	368	1280	1270	--
26...	1500	408	198	218	--
NOV					
14...	1400	314	116	98	--
30...	1300	284	300	230	65
DEC					
12...	1200	384	228	236	--
28...	1400	358	332	321	--
JAN					
12...	1500	429	269	312	--
26...	1230	369	225	224	--
FEB					
08...	1430	343	317	294	--
24...	1015	376	418	424	65
MAR					
08...	1230	305	1400	1150	85
22...	1115	458	6970	8620	96
APR					
06...	1130	643	2530	4390	86
24...	1100	436	300	353	--
MAY					
09...	1230	779	565	1190	--
16...	1100	1510	5490	22400	36
MAY					
22...	1200	1770	3490	16700	--
JUN					
01...	1200	2070	1300	7270	--
08...	1130	2220	1030	6170	--
15...	1000	3600	1460	14200	--
23...	1200	2900	750	5870	--
29...	1100	2590	692	4840	--
JUL					
11...	1330	1040	155	435	--
18...	1315	902	255	621	--
26...	1030	509	100	137	--
AUG					
03...	0930	452	64	78	--
10...	1000	441	44	52	--
16...	1100	518	184	257	--
25...	1030	361	86	84	--
30...	1100	317	57	49	--
SEP					
08...	1200	1130	43400	132000	98
15...	1230	373	119	120	--
19...	1130	446	237	285	--
28...	1300	401	79	86	--

09306380 DOUGLAS CREEK AT RANGELY, CO

LOCATION.--Lat 40°05'17", long 108°46'31", in SE¼NW¼ sec.6, T.1 N., R.101 W., Rio Blanco County, Hydrologic Unit 14050007, on left upstream side of Colorado Highway 64 bridge, about 0.3 mi (0.5 km) above confluence with White River, and about 1 mi (1.6 km) east of Rangely.

DRAINAGE AREA.--425 mi^2 (1,101 km^2).

PERIOD OF RECORD.--October 1976 to September 1978 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 5,235 ft (1,560 m), from topographic map.

REMARKS.--Records fair except those for winter period, which are poor. Several small diversions above station for irrigation of hay meadows. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,250 ft^3/s (92.0 m^3/s) July 24, gage height, 9.87 ft (3.008 m), from rating curve extended above 60 ft^3/s (1.7 m^3/s), on basis of slope-area measurements at 7.70 and 9.87 ft (2.347 and 3.008 m); no flow many days.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 104 ft^3/s (2.95 m^3/s) May 16, gage height, 4.24 ft (1.292 m); no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.90	10	32	37	3.9	.00	.30
2	.00	.00	.00	.00	.00	4.9	11	34	36	2.4	.00	.00
3	.00	.00	.00	.00	.00	2.5	11	26	41	1.1	.00	.00
4	.00	.00	.00	.00	.00	1.7	12	23	29	.60	.00	.00
5	.00	.00	.00	.00	.00	.50	12	33	32	.00	.00	.00
6	.00	1.5	.00	.00	.00	.50	12	49	29	.00	.00	.00
7	33	13	.00	.00	.00	2.5	13	46	27	.00	.00	.00
8	.50	.10	.00	.00	.00	4.9	13	36	22	.00	.00	.00
9	.00	.00	.00	.00	.00	2.5	14	33	20	.00	.00	.00
10	.00	.00	.00	.00	.00	1.7	14	34	19	.00	.00	.00
11	.00	.00	.00	.00	.00	.50	14	30	18	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	15	32	16	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	15	34	14	.00	7.6	.00
14	.00	.00	.00	.00	.00	.00	15	42	13	.00	8.4	.00
15	.00	.00	.00	.00	.00	.00	16	63	12	.00	1.2	.00
16	.00	.00	.00	.00	.00	.00	16	93	11	.00	.10	.00
17	.00	.00	.00	.00	.00	.00	17	98	9.3	1.6	.00	.40
18	.00	.00	.00	.00	.00	.50	17	98	8.3	4.0	.00	2.4
19	.00	.00	.00	.00	.00	1.0	17	91	7.4	.50	.00	.58
20	.00	.00	.00	.00	.00	2.0	18	72	7.0	.00	.00	.20
21	.00	.00	.00	.00	.00	3.0	18	64	7.0	.00	.00	.00
22	1.3	.00	.00	.00	.00	4.8	17	64	5.6	.00	.00	.00
23	.00	.00	.00	.00	.00	5.2	17	66	4.6	.00	.00	.00
24	.00	.00	.00	.00	.00	5.8	17	72	4.6	.00	.00	.00
25	.00	.00	.00	.00	.00	6.4	17	70	5.6	.00	.00	.00
26	.00	.00	.00	.00	.00	7.2	19	68	5.1	.00	.00	.00
27	.00	.00	.00	.00	.00	7.9	19	59	4.1	.00	.10	.00
28	.00	.00	.00	.00	.00	8.8	35	56	3.4	.00	.40	.00
29	.00	.00	.00	.00	---	9.1	28	50	3.6	.00	.20	.00
30	.00	.00	.00	.00	---	9.5	27	44	4.1	.00	.00	.00
31	.00	---	.00	.00	---	9.8	---	40	---	.00	.00	---
TOTAL	34.80	14.60	.00	.00	.00	104.10	496	1652	455.7	14.10	18.00	3.88
MEAN	1.12	.49	.000	.000	.000	3.36	16.5	53.3	15.2	.45	.58	.13
MAX	33	13	.00	.00	.00	9.8	35	98	41	4.0	8.4	2.4
MIN	.00	.00	.00	.00	.00	.00	10	23	3.4	.00	.00	.00
AC-FT	69	29	.00	.00	.00	206	984	3280	904	28	36	7.7

CAL YR 1977 TOTAL 2542.61 MEAN 6.97 MAX 448 MIN .00 AC-FT 5040
WTR YR 1978 TOTAL 2793.18 MEAN 7.65 MAX 98 MIN .00 AC-FT 5540

NOTE.--NO GAGE-HEIGHT RECORD MAR. 1 TO APR. 21.

09339900 EAST FORK SAN JUAN RIVER ABOVE SAND CREEK, NEAR PAGOSA SPRINGS, CO

LOCATION.--Lat 37°23'25", long 106°50'25", Archuleta County, Hydrologic Unit 14080101, on right bank 0.3 mi (0.5 km) upstream from Sand Creek, 4.0 mi (6.4 km) upstream from West Fork San Juan River, and 13 mi (21 km) northeast of Pagosa Springs.

DRAINAGE AREA.--64.1 mi^2 (166.0 km^2).

PERIOD OF RECORD.--October 1956 to current year. Prior to October 1959, published as San Juan River above Sand Creek, near Pagosa Springs.

REVISED RECORDS.--WSP 1713: 1957.

GAGE.--Water-stage recorder. Altitude of gage is 8,900 ft (2,713 m), from topographic map.

REMARKS.--Records good except those for winter period, which are poor. Diversions above station for irrigation of about 500 acres (2.0 km^2) of hay meadows above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--22 years, 82.4 ft^3/s (2.334 m^3/s), 59,700 acre-ft/yr (73.6 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,260 ft^3/s (64.0 m^3/s) Sept. 14, 1970, gage height, 6.75 ft (2.057 m), from rating curve extended above 460 ft^3/s (13 m^3/s), on basis of slope-area measurement at gage height 6.13 ft (1.868 m); minimum daily determined, 3.4 ft^3/s (0.096 m^3/s) Dec. 26, 1958.

EXTREMES OUTSIDE PERIOD OF RECORD.--Greatest flood since at least 1885 occurred Oct. 5, 1911.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 500 ft^3/s (14 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
May 16	0100	620	17.6	4.62	1.408	June 15	1800	*710	20.1	4.76	1.451

Minimum daily discharge, 5.5 ft^3/s (0.16 m^3/s) Dec. 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	18	11	8.5	10	13	109	135	430	175	28	11
2	30	17	12	6.5	8.5	14	80	120	435	155	27	11
3	29	18	14	7.0	8.0	15	67	107	460	140	25	11
4	28	18	14	8.5	9.0	15	64	104	465	128	24	10
5	27	18	13	9.5	10	15	64	98	410	120	23	9.8
6	33	20	11	9.0	11	16	63	89	360	109	23	9.8
7	143	24	12	8.0	11	16	74	81	325	100	26	9.4
8	72	22	12	8.0	11	15	94	78	355	94	24	9.1
9	59	15	11	9.0	7.0	15	96	86	410	92	21	8.8
10	52	14	11	9.5	11	15	83	98	510	89	23	8.4
11	47	16	11	10	11	15	84	117	510	84	20	8.4
12	43	17	11	9.0	9.0	15	102	142	505	83	20	8.4
13	40	16	12	7.0	9.5	14	113	187	530	75	20	8.4
14	33	16	10	7.5	8.5	14	111	274	550	64	18	8.4
15	33	16	10	9.0	8.5	12	107	435	540	54	17	8.0
16	32	16	10	9.0	10	14	105	530	490	59	16	7.7
17	31	16	5.5	9.5	10	13	102	450	390	58	15	10
18	30	16	10	9.5	8.0	15	92	315	345	54	14	9.1
19	29	14	9.0	9.0	8.0	17	94	282	330	50	14	12
20	28	12	7.0	9.5	8.5	19	98	315	330	46	13	12
21	29	14	6.0	9.5	9.0	24	113	310	325	48	13	11
22	28	14	9.5	9.0	9.0	27	113	302	315	43	15	10
23	26	14	11	9.0	10	26	107	355	302	40	15	10
24	25	14	11	8.0	11	26	120	355	298	39	14	11
25	24	15	9.5	7.0	13	24	148	365	290	34	14	17
26	24	16	8.0	8.0	15	28	169	345	254	33	13	16
27	22	17	8.0	10	14	34	190	325	214	31	11	14
28	22	16	9.0	9.5	14	41	160	282	190	30	12	13
29	22	14	9.0	9.0	---	45	152	262	222	31	12	12
30	24	14	9.5	8.5	---	59	152	325	206	30	12	12
31	20	---	10	10	---	88	---	410	---	29	12	---
TOTAL	1116	487	317.0	270.0	282.5	719	3226	7679	11296	2217	554	316.7
MEAN	36.0	16.2	10.2	8.71	10.1	23.2	108	248	377	71.5	17.9	10.6
MAX	143	24	14	10	15	88	190	530	550	175	28	17
MIN	20	12	5.5	6.5	7.0	12	63	78	190	29	11	7.7
AC-FT	2210	966	629	536	560	1430	6400	15230	22410	4400	1100	628

CAL YR 1977 TOTAL 12133.1 MEAN 33.2 MAX 257 MIN 5.5 AC-FT 24070
WTR YR 1978 TOTAL 28480.2 MEAN 78.0 MAX 550 MIN 5.5 AC-FT 56490

NOTE.--NO GAGE-HEIGHT RECORD NOV. 16 TO MAR. 8.

09340000 EAST FORK SAN JUAN RIVER NEAR PAGOSA SPRINGS, CO

LOCATION.--Lat 37°22'10", long 106°53'30", in NW¼SW¼ sec.7, T.36 N., R.1 E., Archuleta County, Hydrologic Unit 14080101, on right bank 0.2 mi (0.3 km) upstream from private highway bridge, 0.5 mi (0.8 km) upstream from West Fork, and 9.5 mi (15.3 km) northeast of Pagosa Springs.

DRAINAGE AREA.--86.9 mi^2 (225.1 km^2).

PERIOD OF RECORD.--May 1935 to current year. Prior to October 1959, published as San Juan River near Pagosa Springs.

GAGE.--Water-stage recorder. Datum of gage is 7,597.63 ft (2,315.758 m), National Geodetic Vertical Datum of 1929. Prior to Sept. 8, 1938, at site 0.2 mi (0.3 km) downstream at different datum.

REMARKS.--Records good except those for winter period, which are poor. Diversions above station for irrigation of about 500 acres (2.0 km^2) of hay meadows above station and a few small hay meadows below station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--43 years, 117 ft^3/s (3.313 m^3/s), 84,770 acre-ft/yr (105 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,460 ft^3/s (69.7 m^3/s) Sept. 14, 1970, gage height, 4.85 ft (1.478 m); maximum gage height, 5.08 ft (1.548 m) Sept. 6, 1970; minimum daily discharge, 5.5 ft^3/s (0.16 m^3/s) Dec. 20, 1939.

EXTREMES OUTSIDE PERIOD OF RECORD.--Greatest flood since at least 1885 occurred Oct. 5, 1911.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 600 ft^3/s (17 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
May 16	2030	755	21.4	3.61	1.100	June 14	2230	*776	22.0	3.68	1.122

Minimum daily discharge, 10 ft^3/s (0.28 m^3/s) Dec. 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49	25	17	12	14	18	185	206	540	200	35	16
2	43	24	19	11	13	18	131	185	558	179	33	16
3	42	24	20	12	12	18	113	165	576	170	32	15
4	40	24	20	13	14	18	107	158	576	152	30	15
5	38	24	18	14	16	19	107	150	520	141	28	14
6	48	27	16	13	16	18	103	135	480	125	28	14
7	198	33	16	12	18	20	125	125	431	113	32	14
8	111	30	16	12	17	22	150	121	475	113	30	14
9	87	23	15	13	17	25	148	129	510	111	27	14
10	72	24	15	13	17	26	129	150	594	107	28	14
11	66	24	16	14	16	24	129	182	564	101	27	13
12	61	24	16	13	15	24	155	227	582	99	27	13
13	55	24	16	11	15	22	173	293	594	91	26	13
14	47	23	15	11	14	21	165	408	636	81	24	13
15	44	23	15	12	14	20	160	546	642	71	23	12
16	42	22	15	12	16	32	158	630	582	76	21	12
17	42	22	10	13	16	22	152	552	480	74	20	22
18	39	22	14	13	12	26	139	400	418	69	19	18
19	37	22	13	13	12	33	143	382	422	64	18	20
20	36	20	12	13	13	36	150	426	413	61	18	22
21	38	20	11	13	14	48	170	455	386	64	18	17
22	35	20	14	13	15	56	168	460	368	55	20	16
23	34	20	15	13	15	49	168	520	359	52	21	16
24	32	20	15	12	16	46	185	525	341	49	20	17
25	31	22	14	11	17	42	215	520	336	46	19	38
26	29	22	11	12	19	52	251	480	281	43	18	29
27	30	22	11	14	20	71	277	465	240	38	17	23
28	29	22	12	14	18	81	240	418	224	37	17	21
29	28	20	12	13	---	85	224	395	251	38	16	19
30	33	20	12	13	---	109	221	455	237	38	17	18
31	28	---	13	14	---	160	---	505	---	37	16	---
TOTAL	1544	692	454	392	431	1261	4941	10768	13616	2695	725	518
MEAN	49.8	23.1	14.6	12.6	15.4	40.7	165	347	454	86.9	23.4	17.3
MAX	198	33	20	14	20	160	277	630	642	200	35	38
MIN	28	20	10	11	12	18	103	121	224	37	16	12
AC-FT	3060	1370	901	778	855	2500	9800	21360	27010	5350	1440	1030

CAL YR 1977 TOTAL 17361.1 MEAN 47.6 MAX 388 MIN 8.0 AC-FT 34440
WTR YR 1978 TOTAL 38037.0 MEAN 104 MAX 642 MIN 10 AC-FT 75450

09342500 SAN JUAN RIVER AT PAGOSA SPRINGS, CO

LOCATION.--Lat 37°15'58", long 107°00'37", in NE¼SW¼ sec.13, T.35 N., R.2 W., Archuleta County, Hydrologic Unit 14080101, on right bank at former bridge site in Pagosa Springs, 0.2 mi (0.3 km) upstream from McCabe Creek, 0.6 mi (1.0 km) downstream from bridge on U.S. Highway 160, and 2.0 mi (3.2 km) upstream from Mill Creek.

DRAINAGE AREA.--298 mi² (772 km²).

PERIOD OF RECORD.--October 1910 to December 1914, May 1935 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1313: 1914(M).

GAGE.--Water-stage recorder. Datum of gage is 7,052.04 ft (2,149.462 m), National Geodetic Vertical Datum of 1929. Jan. 29 to Mar. 6, 1911, nonrecording gage at site 0.5 mi (0.8 km) upstream at different datum. Mar. to Oct. 4, 1911, nonrecording gage at present site at different datum. Nov. 23, 1911, to Nov. 14, 1914, nonrecording gage at site 300 ft (91 m) downstream at different datum.

REMARKS.--Records good. Diversions for irrigation of large areas above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--47 years, 360 ft³/s (10.20 m³/s), 260,800 acre-ft/yr (322 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25,000 ft³/s (708 m³/s) Oct. 5, 1911, gage height, 17.8 ft (5.43 m), from floodmarks, from velocity-area study; minimum daily, 9.7 ft³/s (0.27 m³/s) Oct. 5, 6, 1956.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known since at least 1885, that of Oct. 5, 1911. Flood of June 29, 1927, reached a stage of 13.5 ft (4.11 m), discharge about 16,000 ft³/s (453 m³/s), from information by local residents.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,710 ft³/s (76.7 m³/s) June 15, gage height, 5.65 ft (1.722 m), only peak above base of 1,500 ft³/s (42 m³/s); minimum daily, 14 ft³/s (0.40 m³/s) Sept. 13-15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	97	72	37	39	50	58	690	650	1810	702	78	18
2	92	71	42	32	39	66	505	600	1830	600	83	18
3	85	74	60	35	36	72	408	550	1920	530	77	18
4	85	74	62	45	40	71	396	500	1920	456	78	19
5	85	72	60	47	46	70	392	450	1720	396	66	19
6	92	80	46	46	53	72	376	400	1530	352	56	17
7	704	110	52	37	51	71	452	360	1420	290	55	16
8	432	95	52	37	51	77	550	360	1510	244	57	17
9	312	61	44	40	33	88	570	450	1670	253	48	17
10	259	61	47	47	53	95	460	495	2040	259	50	18
11	216	76	50	48	52	87	440	545	2150	259	52	18
12	187	76	47	45	41	83	545	630	2040	253	50	15
13	175	71	40	34	45	77	600	792	2040	219	48	14
14	156	68	42	36	40	71	555	1070	2180	187	48	14
15	143	68	51	44	40	57	515	1520	2250	168	46	14
16	132	62	51	44	50	57	520	1850	2150	168	44	15
17	126	64	21	47	47	72	495	1760	1790	160	36	31
18	122	64	47	44	36	90	444	1240	1600	160	21	41
19	118	65	42	44	37	106	452	1150	1560	138	21	32
20	112	53	26	45	41	126	450	1260	1510	114	22	46
21	114	55	25	44	42	160	500	1330	1370	101	24	34
22	112	64	44	44	41	200	500	1270	1340	90	25	31
23	106	64	55	41	47	195	500	1480	1230	80	29	27
24	99	61	53	37	51	182	580	1510	1190	88	24	26
25	92	65	40	33	58	172	650	1530	1160	83	21	45
26	88	72	38	34	68	203	750	1390	994	82	22	70
27	85	74	42	48	68	272	840	1410	847	76	22	52
28	83	71	45	44	65	316	750	1230	762	82	19	50
29	82	57	44	44	---	320	700	1150	938	74	17	50
30	90	58	48	41	---	432	650	1380	854	74	18	45
31	83	---	48	50	---	570	---	1620	---	72	19	---
TOTAL	4764	2078	1401	1296	1321	4588	16235	31932	47325	6810	1276	847
MEAN	154	69.3	45.2	41.8	47.2	148	541	1030	1578	220	41.2	28.2
MAX	704	110	62	50	68	570	840	1850	2250	702	83	70
MIN	82	53	21	32	33	57	376	360	762	72	17	14
AC-FT	9450	4120	2780	2570	2620	9100	32200	63340	93870	13510	2530	1680

CAL YR 1977 TOTAL 43841 MEAN 120 MAX 857 MIN 21 AC-FT 86960
WTR YR 1978 TOTAL 119873 MEAN 328 MAX 2250 MIN 14 AC-FT 237800

09343300 RIO BLANCO BELOW BLANCO DIVERSION DAM, NEAR PAGOSA SPRINGS, CO

LOCATION.--Lat 37°12'11", long 106°48'45", in NW¼ sec.11, T.34 N., R.1 E., Archuleta County, Hydrologic Unit 14080101, on left bank 250 ft (76 m) downstream from Blanco Diversion Dam, 1.1 mi (1.8 km) downstream from Leche Creek, and 12 mi (19.2 km) southeast of Pagosa Springs.

DRAINAGE AREA.--69.1 mi^2 (179.2 km^2).

PERIOD OF RECORD.--March 1971 to current year.

GAGE.--Water-stage recorder. Datum of gage is 7,848.81 ft (2,392.3 m), National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation).

REMARKS.--Flows controlled by diversion dam upstream.

COOPERATION.--Records collected and computed by U.S. Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 1,200 ft^3/s (34.0 m^3/s) May 19, 1972; minimum daily, 6.9 ft^3/s (0.20 m^3/s) Dec. 29, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 84 ft^3/s (2.38 m^3/s) Apr. 18, gage height, 3.08 ft (0.939 m); minimum daily, 5.7 ft^3/s (0.16 m^3/s) Nov. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	17	12	10	14	19	19	42	131	25	21	13
2	18	17	16	10	9.9	20	19	43	92	20	21	13
3	20	18	18	10	10	19	20	43	90	21	21	13
4	21	17	17	13	11	19	21	42	95	22	25	12
5	21	17	16	14	14	19	21	43	63	21	25	12
6	19	21	14	14	17	18	20	42	48	21	25	12
7	21	31	15	10	16	18	20	42	46	21	25	12
8	22	33	16	10	14	18	20	41	52	21	25	11
9	22	28	14	11	14	22	20	41	61	21	25	11
10	22	24	15	14	18	23	20	40	113	21	25	11
11	22	22	16	14	16	21	20	41	97	21	24	9.9
12	22	23	14	13	14	20	20	41	79	21	24	11
13	22	22	14	9.9	11	19	20	41	71	21	23	11
14	22	22	15	11	13	14	20	67	70	21	21	12
15	22	21	15	13	14	14	21	98	73	21	19	11
16	18	20	14	15	14	15	21	90	67	21	18	11
17	20	18	12	15	14	18	22	65	28	22	17	25
18	20	19	15	12	12	25	30	41	37	22	15	21
19	20	18	14	13	11	31	20	41	52	22	15	19
20	20	17	10	13	10	24	20	70	77	21	15	23
21	22	20	12	14	11	18	20	75	62	21	15	18
22	20	20	14	13	11	19	20	49	45	21	15	16
23	19	17	14	13	13	19	20	47	47	21	15	16
24	18	17	13	12	14	20	25	48	44	21	15	16
25	18	17	10	9.9	17	20	27	59	54	21	16	30
26	17	21	12	9.9	20	20	31	56	45	21	14	34
27	17	22	13	13	20	20	30	53	27	21	13	25
28	16	19	13	9.9	20	20	22	50	24	21	13	22
29	17	17	13	9.9	---	20	21	46	31	21	13	20
30	24	16	13	9.9	---	20	30	54	31	21	13	19
31	19	---	13	15	---	20	---	63	---	21	13	---
TOTAL	622	611	432	374.4	392.9	612	660	1614	1850	658	584	489.9
MEAN	20.1	20.4	13.9	12.1	14.0	19.7	22.0	52.1	61.7	21.2	18.8	16.3
MAX	24	33	18	15	20	31	31	98	131	25	25	34
MIN	16	16	10	9.9	9.9	14	19	40	24	20	13	9.9
AC-FT	1230	1210	857	743	779	1210	1310	3200	3670	1310	1160	972

CAL YR 1977 TOTAL 7443.6 MEAN 20.4 MAX 68 MIN 7.2 AC-FT 14760
WTR YR 1978 TOTAL 8900.2 MEAN 24.4 MAX 131 MIN 9.9 AC-FT 17650

09344000 NAVAJO RIVER AT BANDED PEAK RANCH, NEAR CHROMO, CO

LOCATION.--Lat 37°05'07", long 106°41'20", in NW¼ sec.24, T.33 N., R.2 E., Archuleta County, Hydrologic Unit 14080101, on left bank at downstream side of private bridge on Banded Peak Ranch, 0.5 mi (0.8 km) downstream from Aspen Creek, 4.0 mi (6.4 km) downstream from East Fork, and 9 mi (14 km) northeast of Chromo.

DRAINAGE AREA.--69.8 mi² (181 km²).

PERIOD OF RECORD.--October 1936 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Datum of gage is 7,940.6 ft (2,420.29 m) National Geodetic Vertical Datum of 1929 (river-profile survey). Prior to Oct. 1, 1949, at datum 3.00 ft (0.914 m) higher.

REMARKS.--Records good except those for periods of no gage height record and those for winter period, which are fair. Diversions for irrigation of about 430 acres (1.74 km²) above station. Several observations of water temperature were obtained and are plublished elsewhere in this report.

COOPERATION.--Records collected and computed by Colorado Division of Water Resources and reviewed by Geological Survey.

AVERAGE DISCHARGE.--42 years, 102 ft³/s (2.889 m³/s), 73,900 acre-ft/yr (91.1 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,350 ft³/s (38.2 m³/s) Sept. 14, 1970, gage height, 4.50 ft (1.372 m), from rating curve extended above 840 ft³/s (24 m³/s), on basis of float-area measurement at gage height 4.44 ft (1.353 m); maximum gage height, 7.02 ft (2.140 m) present datum, May 13, 1941; minimum daily discharge, 8.4 ft³/s (0.24 m³/s) Sept. 29, 1960, result of temporary blockage by channel alteration upstream.

EXTREMES OUTSIDE PERIOD OF RECORD.--A major flood occurred Oct. 5, 1911.

EXTREMES FOR CURRENT YEAR.--Maximum distharge, 1,230 ft³/s (34.8 m³/s) at 2300 June 15, gage height, 4.20 ft (1.280 m), only peak above base of 500 ft³/s (14 m³/s); minimum daily, 18 ft³/s (0.51 m³/s) Nov. 21, Dec. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	26	22	19	21	22	130	184	425	293	53	28
2	32	25	23	19	21	22	97	157	467	256	52	28
3	31	26	22	19	21	24	84	135	506	223	51	28
4	30	26	23	19	23	24	86	128	500	193	50	28
5	29	25	21	19	23	23	86	117	472	179	49	28
6	41	26	21	19	21	25	84	104	435	152	49	27
7	59	32	21	19	21	24	108	95	377	133	50	27
8	44	30	21	19	21	26	137	95	405	130	46	27
9	39	24	20	19	21	26	137	104	456	133	49	27
10	36	24	20	20	22	26	121	117	555	140	54	27
11	35	25	21	21	23	24	125	135	610	140	49	27
12	35	26	21	21	22	24	165	173	680	133	47	26
13	35	25	21	21	22	24	173	235	750	115	44	26
14	34	25	20	22	24	24	150	310	794	102	40	25
15	33	23	21	23	24	23	140	410	794	93	38	25
16	33	21	21	23	24	22	155	435	745	88	36	24
17	31	21	20	24	24	24	142	395	579	84	35	38
18	30	21	20	24	24	26	123	301	511	79	34	32
19	29	21	20	23	22	26	140	289	544	75	34	31
20	29	19	19	24	22	27	163	332	561	70	34	32
21	29	18	18	23	21	29	179	341	522	69	35	31
22	28	21	19	23	21	34	165	341	511	57	33	30
23	28	20	19	22	22	32	160	400	500	49	32	28
24	28	19	19	22	22	32	190	400	494	53	32	29
25	27	20	19	22	23	31	210	377	484	53	32	33
26	27	22	19	23	22	35	232	354	400	50	31	33
27	26	24	19	22	22	42	242	346	328	49	30	30
28	26	24	19	22	22	47	210	318	286	53	29	30
29	26	22	19	22	---	53	207	318	405	53	29	29
30	28	22	19	22	---	69	210	372	368	56	29	28
31	27	---	19	22	---	108	---	425	---	56	28	---
TOTAL	998	703	626	662	621	998	4551	8243	15464	3409	1234	862
MEAN	32.2	23.4	20.2	21.4	22.2	32.2	152	266	515	110	39.8	28.7
MAX	59	32	23	24	24	108	242	435	794	293	54	38
MIN	26	18	18	19	21	22	84	95	286	49	28	24
AC-FT	1980	1390	1240	1310	1230	1980	9030	16350	30670	6760	2450	1710

CAL YR 1977 TOTAL 15880 MEAN 43.5 MAX 231 MIN 18 AC-FT 31500
WTR YR 1978 TOTAL 38371 MEAN 105 MAX 794 MIN 18 AC-FT 76110

09344400 NAVAJO RIVER BELOW OSO DIVERSION DAM, NEAR CHROMO, CO

LOCATION.--Lat 37°01'48", long 106°44'16", in NE¼ sec.9, T.32 N., R.2 E., Archuleta County, Hydrologic Unit 14080101, on left bank 600 ft (183 m) downstream from Oso Diversion Dam, 5.5 mi (8.8 km) east of Chromo, and 6 mi (9.6 km) upstream from Little Navajo River.

DRAINAGE AREA.--100.5 mi^2 (260.6 km^2).

PERIOD OF RECORD.--March 1971 to current year.

GAGE.--Water-stage recorder. Datum of gage is 7,647.71 ft (2,331.0 m), National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation).

REMARKS.--Flows controlled by diversion dam upstream.

COOPERATION.--Records collected and computed by U.S. Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 870 ft^3/s (24.6 m^3/s) May 11, 1973; minimum daily, 14 ft^3/s (0.40 m^3/s) Jan. 25, Dec. 28, 29, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, about 310 ft^3/s (8.78 m^3/s) June 16; minimum daily, 15 ft^3/s (0.42 m^3/s) Sept. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	30	24	27	26	28	35	90	76	56	58	26
2	37	29	28	31	24	32	35	91	55	56	55	26
3	37	30	29	26	25	31	35	91	56	57	52	25
4	37	30	28	28	26	31	40	93	59	57	52	24
5	36	30	28	28	25	30	39	92	57	57	61	18
6	38	32	26	27	26	30	38	92	56	57	52	18
7	39	42	27	25	25	30	37	92	56	57	48	19
8	38	38	27	26	27	30	37	93	56	58	45	20
9	38	36	27	27	21	31	37	93	57	58	41	19
10	38	29	27	29	28	32	36	92	65	58	51	15
11	35	30	27	28	28	31	38	92	100	57	47	16
12	25	31	26	28	24	31	37	93	93	57	39	17
13	25	30	28	23	21	30	38	92	75	57	36	17
14	28	29	31	23	23	30	38	91	82	57	33	17
15	35	28	28	25	28	26	36	100	141	57	31	17
16	35	27	27	27	27	25	36	132	92	57	36	15
17	35	27	27	30	26	28	39	93	56	57	38	31
18	35	26	28	26	22	31	40	87	58	57	37	46
19	34	26	28	29	24	35	40	89	59	58	37	38
20	34	24	31	27	25	38	40	90	58	58	37	40
21	34	26	27	27	31	45	40	89	56	58	36	39
22	33	28	30	25	33	51	39	90	57	58	37	37
23	33	28	33	24	25	49	39	91	58	57	37	37
24	32	27	30	25	26	48	39	93	56	57	34	37
25	32	29	31	24	28	47	38	91	57	54	35	43
26	31	30	33	27	29	55	37	90	57	55	33	45
27	31	31	29	29	28	69	38	90	57	53	32	39
28	31	31	30	25	29	60	39	90	60	50	31	38
29	31	27	30	27	---	40	39	93	57	53	27	37
30	34	27	29	27	---	38	62	97	56	53	24	37
31	31	---	29	27	---	38	---	108	---	57	22	---
TOTAL	1050	888	883	827	730	1150	1161	2900	1978	1748	1234	853
MEAN	33.9	29.6	28.5	26.7	26.1	37.1	38.7	93.5	65.9	56.4	39.8	28.4
MAX	39	42	33	31	33	69	62	132	141	58	61	46
MIN	25	24	24	23	21	25	35	87	55	50	22	15
AC-FT	2080	1760	1750	1640	1450	2280	2300	5750	3920	3470	2450	1690

CAL YR 1977 TOTAL 15152 MEAN 41.5 MAX 131 MIN 17 AC-FT 30050
WTR YR 1978 TOTAL 15402 MEAN 42.2 MAX 141 MIN 15 AC-FT 30550

09345200 LITTLE NAVAJO RIVER BELOW LITTLE OSO DIVERSION DAM, NEAR CHROMO, CO

LOCATION.--Lat 37°04'32", long 106°48'38", in SW¼ sec.23, T.33 N., R.1 E., Archuleta County, Hydrologic Unit 14080101, on right bank at Little Oso Diversion Dam, 3.5 mi (5.6 km) northeast of Chromo, and 4.0 mi (6.4 km) upstream from confluence with Navajo River.

DRAINAGE AREA.--14.2 mi² (36.8 km²).

PERIOD OF RECORD.--June 1971 to current year.

GAGE.--Water-stage recorder. Datum of gage is 7,756.10 ft (2,364.1 m), National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation).

REMARKS.--Flows controlled by diversion dam upstream.

COOPERATION.--Records collected and computed by U.S. Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 134 ft³/s (3.79 m³/s) May 18, 1973; no flow Apr. 14, 1974.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, about 80 ft³/s (2.27 m³/s) May 14; minimum daily, 1.1 ft³/s (0.031 m³/s) Sept. 5-16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	1.2	1.3	1.2	1.2	1.6	5.1	19	27	8.2	2.3	1.3
2	1.3	1.2	1.3	1.2	1.2	1.6	5.2	30	28	6.9	2.2	1.3
3	1.7	1.2	1.3	1.2	1.2	1.7	5.2	29	28	6.5	2.4	1.2
4	1.7	1.4	1.3	1.2	1.2	1.7	5.2	27	28	5.4	2.2	1.2
5	1.6	1.2	1.3	1.2	1.2	1.7	5.1	24	27	5.1	2.1	1.1
6	2.4	1.7	1.3	1.2	1.2	1.7	4.6	21	28	4.9	2.0	1.1
7	4.1	2.4	1.3	1.2	1.2	1.7	5.1	18	27	5.2	2.0	1.1
8	3.1	2.1	1.3	1.2	1.2	2.0	5.1	19	28	4.9	1.9	1.1
9	2.2	.70	1.3	1.2	1.2	2.1	4.8	26	28	5.1	1.9	1.1
10	2.0	1.2	1.3	1.2	1.2	2.0	3.9	32	28	6.7	2.5	1.1
11	1.9	1.5	1.3	1.2	1.2	2.0	3.4	30	28	6.1	2.4	1.1
12	1.7	1.6	1.3	1.2	1.2	1.9	5.5	35	28	5.4	2.1	1.1
13	1.7	1.4	1.3	1.2	1.2	1.9	5.1	51	28	4.8	2.2	1.1
14	1.7	1.4	1.3	1.2	1.2	1.7	5.1	78	28	4.3	1.9	1.1
15	1.6	1.5	1.3	1.2	1.2	1.7	5.1	45	28	4.4	1.7	1.1
16	1.6	1.3	1.3	1.2	1.2	1.6	5.1	28	28	4.3	1.6	1.1
17	1.3	1.4	1.3	1.2	1.2	1.9	5.1	26	26	3.9	1.6	3.0
18	1.3	1.4	1.3	1.2	1.2	2.4	6.1	25	24	3.6	1.4	1.9
19	1.2	1.3	1.2	1.2	1.2	2.8	5.4	27	22	4.1	1.4	1.5
20	1.5	1.3	1.2	1.2	1.2	3.1	9.5	27	21	3.9	1.5	1.6
21	1.3	1.4	1.2	1.2	1.2	4.3	12	27	20	3.2	1.4	1.4
22	1.4	1.4	1.2	1.2	1.2	5.1	11	27	18	2.9	1.5	1.4
23	1.4	1.3	1.2	1.2	1.2	4.8	9.9	27	17	3.2	1.5	1.5
24	1.3	1.3	1.2	1.2	1.2	4.6	10	28	16	2.9	1.5	1.3
25	1.4	1.3	1.2	1.2	1.2	5.1	5.2	28	14	3.8	1.4	2.1
26	1.5	1.4	1.2	1.2	1.2	7.4	5.6	27	13	3.3	1.3	2.2
27	1.5	1.6	1.2	1.2	1.2	10	4.2	26	12	2.8	1.2	1.5
28	1.5	1.4	1.2	1.2	1.2	10	4.3	26	12	2.5	1.2	1.4
29	1.4	1.4	1.2	1.2	---	12	4.4	27	15	2.5	1.3	1.5
30	1.9	1.3	1.2	1.2	---	15	4.4	27	11	2.6	1.4	1.4
31	1.6	---	1.2	1.2	---	12	---	27	---	2.5	1.5	---
TOTAL	53.1	42.20	39.0	37.2	33.6	129.1	175.7	914	686	135.9	54.5	41.9
MEAN	1.71	1.41	1.26	1.20	1.20	4.16	5.86	29.5	22.9	4.38	1.76	1.40
MAX	4.1	2.4	1.3	1.2	1.2	15	12	78	28	8.2	2.5	3.0
MIN	1.2	.70	1.2	1.2	1.2	1.6	3.4	18	11	2.5	1.2	1.1
AC-FT	105	84	77	74	67	256	349	1810	1360	270	108	83

CAL YR 1977 TOTAL 859.04 MEAN 2.35 MAX 15 MIN .61 AC-FT 1700
WTR YR 1978 TOTAL 2342.20 MEAN 6.42 MAX 78 MIN .70 AC-FT 4650

09346000 NAVAJO RIVER AT EDITH, CO

LOCATION.--Lat 37°00'10", long 106°54'25", in NW¼NW¼ sec.24, T.32 N., R.1 W., Archuleta County, Hydrologic Unit 14080101, on right bank 290 ft (88 m) downstream from highway bridge, 0.2 mi (0.3 km) southeast of Edith, 0.5 mi (0.8 km) upstream from Colorado-New Mexico State line, and 1.3 mi (2.1 km) upstream from Coyote Creek.

DRAINAGE AREA.--172 mi² (445 km²).

PERIOD OF RECORD.--September 1912 to current year. Monthly or yearly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1243: 1943, 1945. WSP 1633: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 7,033.00 ft (2,143.658 m), National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation. Prior to Jan. 1, 1929, nonrecording gage at site 240 ft (73 m) upstream at different datum. June 2, 1935, to June 27, 1941, water-stage recorder at sites 200 and 240 ft (61 and 73 m) upstream at datum 2.0 ft (0.61 m) higher. June 28, 1941, to June 20, 1961, at site 50 ft (15 m) downstream at same datum.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of about 1,700 acres (6.88 km²) above station. High-water diversions above station into Heron Reservoir through Azotea tunnel began in March 1971. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--58 years (water years 1913-70), 155 ft³/s (4.390 m³/s), 112,300 acre-ft/yr (138 hm³/yr), prior to diversions through Azotea tunnel; 8 years (water years 1971-78), 60.9 ft³/s (1.725 m³/s), 44,120 acre-ft/yr (54.4 hm³/yr), subsequent to diversion through Azotea tunnel.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,840 ft³/s (80.4 m³/s) Apr. 23, 1942, gage height, 6.55 ft (1.996 m), from rating curve extended above 1,100 ft³/s (31 m³/s); minimum daily, 8.0 ft³/s (0.23 m³/s) Sept. 25, 1953, Aug. 7, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 5, 1911, exceeded all other observed floods at this location.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 227 ft³/s (6.43 m³/s) June 16, gage height, 3.73 ft (1.137 m); maximum gage height, 4.33 ft (1.320 m) Jan. 27 (backwater from ice); minimum daily discharge, 11 ft³/s (0.31 m³/s) Sept. 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54	33	21	19	24	28	130	116	80	65	52	26
2	54	31	22	15	22	32	112	140	58	60	49	23
3	53	33	26	18	18	34	93	138	53	68	52	21
4	52	33	28	22	20	34	91	130	54	63	45	21
5	49	32	26	22	22	34	89	123	53	51	51	21
6	51	34	20	20	24	34	80	125	61	52	46	16
7	53	45	22	18	24	34	89	130	71	49	40	17
8	52	41	22	18	24	36	91	140	78	49	41	21
9	52	34	20	20	17	38	91	155	85	52	39	27
10	45	30	20	22	24	39	83	155	94	51	51	27
11	38	34	22	22	22	37	78	148	114	58	49	28
12	37	34	22	20	20	37	85	142	107	54	41	26
13	36	32	20	17	20	36	85	145	89	61	43	22
14	37	31	22	18	19	36	83	150	96	58	41	23
15	39	31	24	20	19	32	78	150	123	56	36	15
16	39	30	24	20	22	32	78	148	112	58	33	11
17	38	30	14	22	22	37	76	118	61	56	36	30
18	37	31	20	20	18	42	73	114	63	56	28	34
19	38	31	18	20	18	48	69	107	65	51	27	34
20	37	29	15	20	20	60	71	107	65	52	30	36
21	38	25	18	20	20	76	74	118	65	53	26	33
22	38	29	20	20	20	97	68	114	63	53	28	32
23	38	28	24	19	22	112	62	107	61	54	32	32
24	37	26	24	18	26	99	66	101	52	58	31	31
25	36	27	20	16	28	95	65	93	53	58	31	37
26	36	31	18	16	32	105	66	89	58	56	26	37
27	36	31	20	22	32	123	71	80	53	52	22	33
28	33	31	22	20	30	116	68	76	60	47	19	32
29	33	26	22	20	---	101	68	80	76	51	18	31
30	37	26	22	20	---	110	81	85	73	47	17	31
31	34	---	22	24	---	123	---	99	---	49	18	---
TOTAL	1287	939	660	608	629	1897	2414	3723	2196	1698	1098	808
MEAN	41.5	31.3	21.3	19.6	22.5	61.2	80.5	120	73.2	54.8	35.4	26.9
MAX	54	45	28	24	32	123	130	155	123	68	52	37
MIN	33	25	14	15	17	28	62	76	52	47	17	11
AC-FT	2550	1860	1310	1210	1250	3760	4790	7380	4360	3370	2180	1600

CAL YR 1977 TOTAL 14553.0 MEAN 39.9 MAX 169 MIN 8.0 AC-FT 28870
WTR YR 1978 TOTAL 17957.0 MEAN 49.2 MAX 155 MIN 11 AC-FT 35620

09347205 MIDDLE FORK PIEDRA RIVER NEAR DYKE, CO

LOCATION.--Lat 37°27'10", long 107°10'33", in NE¼SW¼ sec.10, T.37 N., R.3 W., Hinsdale County, Hydrologic Unit 14080102, on left bank 1.8 mi (2.9 km) northeast of Piedra Guard Station, 2 mi (3.2 km) downstream from headgate of Toner-Taylor ditch, and 15 mi (24 km) northwest of Pagosa Springs.

DRAINAGE AREA.--34.1 mi² (88.3 km²).

PERIOD OF RECORD.--October 1977 to September 1978.

GAGE.--Water-stage recorder. Altitude of gage is 7,860 ft (2,400 m). (Record is not equivalent to record for station 09347200.)

REMARKS.--Records good except those for winter period, which are poor. There is one small diversion above station for irrigation of a few acres of hay meadow below the station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 515 ft³/s (14.6 m³/s) June 14, gage height, 3.23 ft (0.985 m); minimum daily, 2.6 ft³/s (0.074 m³/s) Aug. 20, 28, 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.9	7.2	5.5	5.0	6.5	7.5	50	60	197	91	7.5	3.0
2	9.1	8.7	6.0	4.5	5.0	8.0	36	56	208	77	8.7	3.0
3	8.3	7.9	8.5	5.5	4.8	9.0	31	52	214	66	8.7	3.0
4	9.5	7.9	8.5	6.0	5.5	9.0	30	50	218	56	6.8	2.8
5	10	7.5	8.0	6.0	6.0	8.5	32	47	194	48	6.4	2.8
6	14	9.9	6.5	5.5	6.5	9.0	35	42	172	42	6.1	2.8
7	47	12	7.0	5.0	6.5	9.0	43	39	181	37	6.4	2.8
8	30	12	7.0	5.0	6.5	8.5	48	38	204	32	5.4	2.8
9	26	9.9	6.0	5.5	4.2	8.5	43	45	246	32	5.8	2.8
10	22	15	6.5	6.0	6.5	8.3	37	60	300	35	6.1	2.8
11	20	14	7.0	6.0	6.5	7.9	41	68	305	35	5.8	2.8
12	18	10	6.5	5.0	5.0	7.5	58	77	315	31	5.4	2.8
13	18	10	6.0	4.6	5.5	7.2	64	93	325	25	6.1	2.8
14	16	10	6.5	5.0	5.0	6.8	54	122	360	20	5.8	2.8
15	16	10	7.0	6.0	5.0	7.0	52	160	380	18	5.0	2.8
16	14	9.9	5.0	6.0	6.0	7.5	55	184	315	16	4.7	2.8
17	14	9.9	3.0	6.0	5.5	8.7	48	166	260	14	4.4	4.0
18	14	9.9	6.5	5.5	4.6	10	45	126	242	14	4.0	4.4
19	12	9.5	4.6	5.5	4.8	12	47	126	236	12	3.6	6.7
20	12	8.0	3.6	5.5	5.0	12	50	155	194	12	2.6	7.9
21	12	8.0	5.5	5.5	5.0	16	55	148	184	13	2.8	4.4
22	12	9.0	7.0	5.5	5.5	19	53	158	169	14	3.8	3.8
23	12	9.0	7.0	5.0	6.5	16	52	140	152	10	3.6	3.4
24	11	8.5	6.0	4.6	7.0	16	48	145	152	9.5	3.2	2.8
25	11	9.5	5.5	4.4	7.5	15	75	145	142	9.1	3.4	3.0
26	9.9	10	5.0	4.6	8.5	17	80	135	120	7.9	3.4	4.7
27	9.5	10	5.5	6.0	8.5	23	84	140	107	7.5	3.0	3.4
28	9.5	10	6.0	5.5	8.0	28	68	113	99	6.8	2.6	3.4
29	9.5	8.0	6.0	5.5	---	28	62	117	135	7.5	2.6	3.8
30	10	8.0	6.5	5.5	---	35	63	142	113	7.2	3.0	3.8
31	8.7	---	6.5	6.5	---	43	---	172	---	6.4	3.0	---
TOTAL	454.9	289.2	191.7	167.7	167.4	427.9	1539	3321	6439	811.9	149.7	104.9
MEAN	14.7	9.64	6.18	5.41	5.98	13.8	51.3	107	215	26.2	4.83	3.50
MAX	47	15	8.5	6.5	8.5	43	84	184	380	91	8.7	7.9
MIN	8.3	7.2	3.0	4.4	4.2	6.8	30	38	99	6.4	2.6	2.8
AC-FT	902	574	380	333	332	849	3050	6590	12770	1610	297	208

WTR YR 1978 TOTAL 14064.3 MEAN 38.5 MAX 380 MIN 2.6 AC-FT 27900

09349800 PIEDRA RIVER NEAR ARBOLES, CO

LOCATION.--Lat 37°05'18", long 107°23'50", in NE¼SW¼ sec.21, T.33 N., R.5 W., Archuleta County, Hydrologic Unit 14080102, on left bank 3 mi (5 km) downstream from Ignacio Creek, 5.2 mi (8.4 km) northeast of Arboles Post Office, and 8 mi (13 km) upstream from mouth.

DRAINAGE AREA.--629 mi^2 (1,629 km^2).

PERIOD OF RECORD.--August 1962 to current year. Gage operated 1895-99 and 1910-27 at site 7.5 mi (12.1 km) downstream at altitude 6,000 ft (1,830 m). Low-flow records probably not equivalent.

GAGE.--Water-stage recorder. Datum of gage is 6,147.52 ft (1,873.764 m) Colorado State Highway Department bench mark.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of about 2,800 acres (11 km^2) above station. Several observations of water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--16 years, 336 ft^3/s (9.516 m^3/s), 243,400 acre-ft/yr (300 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,370 ft^3/s (237 m^3/s) Sept. 6, 1970, gage height, 6.38 ft (1.945 m) recorded, 7.55 ft (2.301 m) from floodmarks, from rating curve extended above 3,300 ft^3/s (93 m^3/s), on basis of slope-area measurement of peak flow; minimum, 11 ft^3/s (0.31 m^3/s) Dec. 9, 1963, Oct. 1, 1966.

EXTREMES OUTSIDE PERIOD OF RECORD.--Major floods occurred Sept. 5 or 6, 1909, and Oct. 5, 1911.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,260 ft^3/s (64.0 m^3/s) at 0500 hours May 16, gage height, 3.99 ft (1.216 m), no peak above base of 1,500 ft^3/s (42 m^3/s); minimum daily, 25 ft^3/s (0.71 m^3/s) Sept. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	83	60	51	42	46	62	1030	772	1460	432	64	37
2	78	55	48	42	44	73	832	818	1510	426	71	36
3	76	57	53	54	47	101	625	783	1510	370	64	34
4	73	57	52	49	43	89	599	762	1510	330	58	34
5	72	57	52	44	45	122	688	678	1420	295	55	33
6	71	60	50	41	46	117	674	694	1250	266	50	33
7	176	92	45	46	45	103	820	681	1180	242	46	31
8	204	92	50	49	46	103	1020	687	1270	218	44	29
9	154	76	51	55	45	109	1010	804	1340	203	44	29
10	136	54	47	50	45	103	796	855	1520	196	43	28
11	122	60	50	45	48	92	739	846	1640	222	47	27
12	114	65	50	43	46	96	986	923	1580	200	46	26
13	101	63	56	44	45	87	1070	1020	1560	178	51	25
14	99	61	46	47	51	80	901	1280	1550	153	45	26
15	94	60	51	52	47	68	806	1710	1590	141	42	26
16	87	60	48	51	51	68	783	2070	1550	132	39	26
17	85	57	49	43	47	76	714	2040	1300	130	37	27
18	82	56	39	47	48	100	596	1520	1140	118	36	33
19	78	55	46	45	51	123	589	1420	1050	109	33	37
20	75	57	46	44	54	151	603	1430	1030	98	30	39
21	75	50	39	45	48	174	663	1430	912	92	30	44
22	73	54	64	44	45	216	655	1430	876	86	33	42
23	74	58	84	48	43	236	608	1430	825	83	41	40
24	74	54	84	51	43	251	655	1400	778	79	43	40
25	71	52	71	46	45	232	810	1430	757	83	40	41
26	69	53	61	52	48	256	886	1270	684	77	40	46
27	67	59	72	55	48	306	1020	1250	596	69	41	51
28	63	60	72	54	48	361	904	1070	534	66	36	48
29	62	52	70	51	---	384	847	966	579	65	33	46
30	64	49	58	51	---	498	813	1100	592	63	34	45
31	62	---	42	46	---	639	---	1270	---	63	36	---
TOTAL	2814	1795	1697	1476	1308	5476	23742	35839	35093	5285	1352	1059
MEAN	90.8	59.8	54.7	47.6	46.7	177	791	1156	1170	170	43.6	35.3
MAX	204	92	84	55	54	639	1070	2070	1640	432	71	51
MIN	62	49	39	41	43	62	589	678	534	63	30	25
AC-FT	5580	3560	3370	2930	2590	10860	47090	71090	69610	10480	2680	2100

CAL YR 1977 TOTAL 33608 MEAN 92.1 MAX 586 MIN 32 AC-FT 66660
WTR YR 1978 TOTAL 116936 MEAN 320 MAX 2070 MIN 25 AC-FT 231900

09352900 VALLECITO CREEK NEAR BAYFIELD, CO
(Hydrologic bench-mark station)

LOCATION.--Lat 37°28'39", long 107°32'35", in NE¼NW¼ sec.16, T.37 N., R.6 W., La Plata County, Hydrologic Unit 14080101, on right bank 60 ft (18 m) upstream from Fall Creek, 0.8 mi (1.3 km) downstream from Bear Creek, 6.7 mi (10.8 km) north of Vallecito Dam, and 18 mi (29 km) north of Bayfield.

DRAINAGE AREA.--72.1 mi² (186.7 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1962 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 7,906.80 ft (2,409.773 m), National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. No diversion above station.

AVERAGE DISCHARGE.--16 years, 136 ft³/s (3.852 m³/s), 98,530 acre-ft/yr (121 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,050 ft³/s (200 m³/s) Sept. 6, 1970, gage height, 5.51 ft (1.679 m) from water-stage recorder, 6.76 ft (2.060 m) from floodmarks, from rating curve extended above 1,400 ft³/s (40 m³/s), on basis of slope-area measurement of peak flow; minimum daily, 6.7 ft³/s (0.19 m³/s) Dec. 28, 1976.

EXTREMES OUTSIDE PERIOD OF RECORD.--Major floods occurred in October 1911 and June 1927.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,100 ft³/s (31.2 m³/s) June 10, gage height, 2.93 ft (0.893 m), only peak above base of 1,000 ft³/s (28 m³/s); minimum daily, 10 ft³/s (0.28 m³/s) Jan. 2, 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	24	20	11	13	13	102	168	672	296	82	28
2	42	26	19	10	13	14	88	150	712	280	77	27
3	40	26	19	10	13	14	80	137	696	270	69	26
4	39	24	19	13	13	14	74	134	648	236	65	25
5	37	24	19	14	13	14	72	127	576	216	58	23
6	43	27	19	14	14	14	72	117	552	200	56	22
7	129	28	20	14	13	15	79	107	648	196	53	22
8	107	28	18	14	12	15	88	100	688	188	51	22
9	90	18	18	14	11	16	86	102	704	192	49	22
10	82	23	19	14	14	17	79	117	864	212	53	21
11	76	24	18	14	12	17	82	137	832	250	49	21
12	66	24	17	13	13	17	110	176	808	220	44	20
13	63	24	17	13	13	18	137	224	808	200	43	20
14	58	24	18	13	13	19	124	368	800	164	43	20
15	56	24	16	14	13	19	117	552	824	160	39	20
16	52	23	17	14	13	23	112	600	744	160	37	19
17	50	22	18	14	14	20	102	536	632	176	34	24
18	46	23	16	14	15	20	94	386	592	224	32	25
19	44	22	13	14	16	24	96	374	600	196	29	28
20	41	20	11	14	15	23	104	374	568	168	28	28
21	40	23	12	13	13	28	127	350	536	153	31	25
22	39	24	13	13	13	32	127	344	512	120	52	25
23	37	24	14	13	13	32	137	410	496	110	50	25
24	35	22	14	13	14	31	172	438	496	112	44	26
25	33	23	13	13	14	32	228	466	480	98	41	26
26	32	23	12	14	14	37	240	438	417	84	40	33
27	31	24	13	14	14	46	260	459	380	82	37	34
28	29	23	13	13	14	54	220	350	368	90	33	35
29	28	20	12	13	---	56	204	431	390	100	30	32
30	29	20	12	13	---	68	188	592	320	88	30	29
31	27	---	11	13	---	80	---	632	---	90	29	---
TOTAL	1566	704	490	410	375	842	3801	9896	18323	5331	1408	753
MEAN	50.5	23.5	15.8	13.2	13.4	27.2	127	319	611	172	45.4	25.1
MAX	129	28	20	14	16	80	260	632	864	296	82	35
MIN	27	18	11	10	11	13	72	100	320	82	28	19
AC-FT	3110	1400	972	813	744	1670	7540	19630	36340	10570	2790	1490

CAL YR 1977 TOTAL 22544.7 MEAN 61.8 MAX 392 MIN 7.7 AC-FT 44720
WTR YR 1978 TOTAL 43899.0 MEAN 120 MAX 864 MIN 10 AC-FT 87070

09352900 VALLECITO CREEK NEAR BAYFIELD, CO--Continued
(Hydrologic Bench-Mark Station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1962 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: November 1962 to current year.

INSTRUMENTATION.--Water-temperature recorder since November 1962.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 20.0°C July 10, 1974; minimum, freezing point on many days during winter months each year.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 16.0°C July 28; minimum, freezing point on many days during winter months.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI FECAL, (COLS. PER 100 ML)
NOV									
07...	0940	26	70	7.1	2.0	10.0	27	<1	2
30...	1000	17	68	8.6	.0	10.6	>160	<1	K1
DEC									
27...	1145	14	77	8.2	.0	9.8	K5	<1	K2
JAN									
31...	1145	14	78	7.8	4.0	9.9	K8	<1	<1
MAR									
07...	1115	15	75	8.2	1.0	10.8	22	<1	55
APR									
03...	0930	80	62	7.9	2.0	10.3	<1	<1	K1
26...	0920	236	65	7.3	3.0	10.0	K5	<1	K2
MAY									
24...	0820	431	70	7.4	4.0	9.8	K1	<1	K13
JUN									
29...	0800	350	65	--	9.0	8.6	32	<1	K2
AUG									
01...	1100	82	47	7.6	9.0	8.3	K8	K8	K25
29...	0945	29	85	8.1	9.0	8.7	K5	<1	K20
SEP									
26...	0920	35	77	7.8	7.0	9.0	K16	<1	K5

DATE	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)
NOV									
07...	29	7	8.8	1.8	.9	.1	.5	27	0
30...	33	13	9.6	2.2	1.1	.1	.6	24	0
DEC									
27...	35	12	10	2.4	1.1	.1	.8	28	0
JAN									
31...	37	11	11	2.3	1.1	.1	.6	32	0
MAR									
07...	37	11	11	2.3	.9	.1	.6	32	0
APR									
03...	37	16	12	1.8	.6	.0	.6	26	0
26...	35	11	11	1.9	.5	.0	.5	30	0
MAY									
24...	31	7	9.4	1.9	--	--	.4	--	--
JUN									
29...	24	--	7.6	1.3	.4	.0	.3	--	--
AUG									
01...	23	9	6.9	1.5	.7	.1	.4	--	--
29...	31	9	9.4	1.9	1.1	.1	.5	--	--
SEP									
26...	37	12	11	2.4	1.0	.1	.6	--	--

K BASED ON NON-IDEAL COLONY COUNT.

09352900 VALLECITO CREEK NEAR BAYFIELD, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)
NOV									
07...	22	7.1	.4	.2	3.8	39	37	.12	.00
30...	20	17	--	.3	4.3	53	--	.24	.00
DEC									
27...	23	11	.7	.4	4.3	--	44	--	--
JAN									
31...	26	16	.6	.2	4.3	43	52	.17	.01
MAR									
07...	26	12	.4	.4	4.9	36	48	.16	.02
APR									
03...	21	9.8	1.2	.2	4.4	33	43	.15	.02
26...	25	8.2	.5	.2	4.3	45	42	.13	.00
MAY									
24...	24	11	.6	.2	3.8	40	--	.08	.00
JUN									
29...	--	3.6	--	.2	2.7	23	--	.11	.00
AUG									
01...	16	8.0	.4	.3	2.9	24	30	.07	.00
29...	22	13	.8	.3	3.8	51	44	.12	.01
SEP									
26...	25	14	.7	.2	4.0	49	49	.12	.01

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	SELE-NIUM, TOTAL (UG/L AS SE)
MAY											
24...	0820	1	0	0	20	8	210	3	30	.1	0
SEP											
26...	0920	0	0	1	0	2	50	12	10	.0	0

DATE	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	CYANIDE TOTAL (MG/L AS CN)	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DIS-SOLVED, RADON METHOD (PCI/L)	URANIUM NATURAL DIS-SOLVED (UG/L AS U)
MAY											
24...	0	10	.00	--	--	--	--	--	--	--	--
SEP											
26...	0	10	.00	<.5	<.4	.9	<.4	.8	<.4	.06	<.4

09352900 VALLECITO CREEK NEAR BAYFIELD, CO--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	8.0	3.0	3.0	1.0	.0	.0	.0	.0	.0	.0	.0	---
2	7.0	3.0	3.0	1.0	.0	.0	.0	.0	.0	.0	.0	---
3	6.0	6.0	3.0	1.0	1.0	.0	.0	.0	.0	.0	.0	---
4	8.0	6.0	4.0	1.0	2.0	1.0	.0	.0	.0	.0	.0	---
5	7.0	6.0	4.0	1.0	2.0	2.0	.0	.0	.0	.0	.0	---
6	7.0	7.0	4.0	2.0	1.0	.0	.0	.0	.0	.0	1.0	---
7	8.0	6.0	4.0	2.0	.0	.0	.0	.0	.0	.0	2.0	---
8	6.0	3.0	4.0	1.0	.0	.0	.0	.0	.0	.0	2.0	---
9	6.0	2.0	1.0	.0	.0	.0	.0	.0	.0	.0	2.0	2.0
10	6.0	3.0	.0	.0	.0	.0	.0	.0	.0	.0	2.0	2.0
11	5.0	1.0	1.0	.0	.0	.0	.0	.0	.0	.0	2.0	1.0
12	4.0	.0	2.0	.0	.0	.0	.0	.0	.0	.0	1.0	1.0
13	4.0	1.0	2.0	.0	.0	.0	.0	.0	.0	.0	1.0	1.0
14	4.0	2.0	1.0	.0	.0	.0	.0	.0	.0	.0	1.0	.0
15	4.0	2.0	2.0	1.0	.0	.0	.0	.0	.0	.0	1.0	1.0
16	4.0	2.0	2.0	.0	.0	.0	.0	.0	.0	.0	1.0	.0
17	4.0	2.0	2.0	1.0	.0	.0	.0	.0	.0	.0	1.0	.0
18	4.0	2.0	2.0	2.0	.0	.0	.0	.0	.0	.0	2.0	1.0
19	4.0	2.0	2.0	.0	.0	.0	.0	.0	.0	.0	2.0	2.0
20	3.0	2.0	.0	.0	.0	.0	.0	.0	.0	.0	2.0	2.0
21	3.0	3.0	.0	.0	.0	.0	.0	.0	.0	.0	2.0	2.0
22	3.0	2.0	.0	.0	.0	.0	.0	.0	.0	.0	2.0	2.0
23	3.0	2.0	.0	.0	.0	.0	.0	.0	.0	.0	2.0	2.0
24	3.0	1.0	.0	.0	.0	.0	.0	.0	.0	.0	4.0	2.0
25	3.0	2.0	1.0	.0	.0	.0	.0	.0	.0	.0	4.0	2.0
26	3.0	2.0	2.0	1.0	.0	.0	.0	.0	.0	.0	4.0	2.0
27	3.0	2.0	2.0	2.0	.0	.0	.0	.0	.0	.0	4.0	2.0
28	3.0	2.0	2.0	1.0	.0	.0	.0	.0	.0	.0	6.0	3.0
29	3.0	2.0	1.0	.0	.0	.0	.0	.0	---	---	4.0	3.0
30	3.0	2.0	.0	.0	.0	.0	.0	.0	---	---	6.0	3.0
31	3.0	1.0	---	---	.0	.0	.0	.0	---	---	---	3.0

09352900 VALLECITO CREEK NEAR BAYFIELD, CO--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	4.0	2.0	3.0	2.0	7.0	3.0	12.0	7.0	13.0	9.0	11.0	9.0
2	4.0	2.0	3.0	2.0	7.0	2.0	13.0	6.0	13.0	10.0	9.0	8.0
3	3.0	2.0	6.0	3.0	7.0	2.0	12.0	6.0	14.0	10.0	11.0	9.0
4	3.0	2.0	5.0	2.0	6.0	2.0	12.0	6.0	14.0	10.0	12.0	9.0
5	3.0	2.0	2.0	1.0	5.0	3.0	12.0	6.0	14.0	9.0	12.0	10.0
6	3.0	2.0	2.0	1.0	7.0	2.0	12.0	5.0	14.0	10.0	12.0	10.0
7	4.0	2.0	3.0	1.0	7.0	3.0	12.0	5.0	12.0	10.0	12.0	11.0
8	4.0	2.0	6.0	1.0	8.0	3.0	12.0	7.0	12.0	9.0	12.0	8.0
9	4.0	2.0	8.0	2.0	8.0	3.0	12.0	8.0	12.0	10.0	9.0	8.0
10	6.0	2.0	7.0	3.0	8.0	3.0	12.0	9.0	12.0	9.0	9.0	9.0
11	5.0	2.0	9.0	3.0	8.0	3.0	11.0	9.0	11.0	9.0	10.0	8.0
12	5.0	2.0	9.0	4.0	8.0	3.0	13.0	9.0	13.0	10.0	9.0	7.0
13	5.0	2.0	10.0	3.0	8.0	3.0	13.0	8.0	13.0	10.0	9.0	8.0
14	5.0	2.0	9.0	3.0	10.0	4.0	12.0	8.0	12.0	9.0	9.0	6.0
15	5.0	2.0	8.0	3.0	10.0	6.0	14.0	9.0	12.0	7.0	10.0	8.0
16	5.0	2.0	7.0	3.0	10.0	4.0	13.0	10.0	12.0	8.0	10.0	8.0
17	5.0	2.0	5.0	3.0	10.0	4.0	13.0	9.0	12.0	9.0	9.0	9.0
18	5.0	2.0	7.0	2.0	11.0	5.0	14.0	8.0	12.0	9.0	9.0	8.0
19	6.0	2.0	6.0	2.0	12.0	6.0	14.0	9.0	12.0	9.0	8.0	7.0
20	6.0	2.0	5.0	3.0	12.0	6.0	14.0	10.0	13.0	11.0	7.0	3.0
21	6.0	2.0	5.0	3.0	12.0	5.0	14.0	10.0	12.0	10.0	5.0	2.0
22	6.0	2.0	9.0	3.0	12.0	6.0	15.0	8.0	11.0	10.0	8.0	5.0
23	6.0	2.0	8.0	3.0	13.0	7.0	16.0	10.0	12.0	9.0	8.0	6.0
24	6.0	2.0	8.0	3.0	13.0	7.0	16.0	11.0	12.0	9.0	8.0	8.0
25	6.0	3.0	8.0	3.0	13.0	8.0	.0	11.0	11.0	8.0	8.0	7.0
26	6.0	3.0	8.0	3.0	11.0	6.0	---	10.0	12.0	8.0	10.0	7.0
27	5.0	3.0	5.0	4.0	11.0	8.0	13.0	11.0	11.0	7.0	10.0	8.0
28	6.0	1.0	8.0	2.0	10.0	9.0	16.0	11.0	11.0	7.0	8.0	6.0
29	5.0	2.0	8.0	2.0	10.0	8.0	15.0	11.0	11.0	9.0	9.0	6.0
30	4.0	3.0	8.0	2.0	10.0	7.0	15.0	12.0	11.0	8.0	9.0	6.0
31	---	---	7.0	3.0	---	---	15.0	12.0	11.0	9.0	---	---

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
NOV				
07...	0940	26	1	.07
30...	1000	17	1	.05
DEC				
27...	1145	13	2	.07
JAN				
31...	1145	14	1	.04
MAR				
07...	1115	15	4	.16
APR				
03...	0930	80	2	.43
26...	0920	236	3	1.9
MAY				
24...	0820	431	3	3.5
JUN				
02...	1145	640	10	17
29...	0800	350	2	1.9
AUG				
01...	1100	82	3	.66
29...	0945	29	2	.16
SEP				
26...	0920	34	3	.28

09353000 VALLECITO RESERVOIR NEAR BAYFIELD, CO

LOCATION.--Lat 37°23'00", long 107°34'30", in SW¼SW¼ sec.18, T.36 N., R.6 W., La Plata County, Hydrologic Unit 14080101, in gatehouse above outlet gates at Vallecito Dam on Los Pinos (Pine) River, 300 ft (91 m) left of spillway, 0.4 mi (0.6 km) upstream from Jack Creek, and 11 mi (18 km) northeast of Bayfield.

PERIOD OF RECORD.--April 1941 to current year.

REVISED RECORDS.--WSP 959: 1941. WSP 1513: 1956.

GAGE.--Water-stage recorder. Datum of gage is 7,580 ft (2,310.4 m) National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation); gage readings have been reduced to elevations NGVD.

REMARKS.--Reservoir is formed by earth and rockfill dam; dam completed in March 1941. Capacity of reservoir, 126,300 acre-ft (156 hm³) between elevations 7,580 ft (2,310.4 m), sill of outlet gate, and 7,665 ft (2,336.3 m), top of spillway gates. Dead storage, 3,395 acre-ft (4.19 hm³). Figures given are usable contents. Reservoir is used to store water for irrigation in Los Pinos (Pine) River basin.

COOPERATION.--Records furnished by Pine River Irrigation District.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 128,200 acre-ft (158 hm³) July 27, 1957, elevation, 7,665.72 ft (2,336.511 m); minimum, 1,520 acre-ft (1.87 hm³) Oct. 24, 25, 1944, elevation, 7,584.10 ft (2,311.634 m). No usable storage prior to April 1941.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 117,800 acre-ft (145 hm³) June 26, elevation, 7,661.83 ft (2,335.326 m); minimum, 11,080 acre-ft (13.7 hm³) Oct. 1, elevation, 7,601.54 ft (2,316.949 m).

MONTHEND ELEVATION NGVD AND CONTENTS AT 0900, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	7,601.49	11,050	-
Oct. 31	7,604.30	13,220	+2,170
Nov. 30	7,607.02	15,540	+2,320
Dec. 31	7,609.37	17,740	+2,200
CAL YR 1977			-30,150
Jan. 31	7,611.61	20,010	+2,270
Feb. 28	7,613.43	21,970	+1,960
Mar. 31	7,617.06	26,210	+4,240
Apr. 30	7,629.74	45,140	+18,930
May 31	7,648.87	85,080	+39,940
June 30	7,661.71	117,400	+32,320
July 31	7,652.62	94,150	-23,250
Aug. 31	7,638.06	61,040	-33,110
Sept. 30	7,623.13	34,420	-26,620
WTR YR 1978			+23,370

09353500 LOS PINOS RIVER NEAR BAYFIELD, CO
(LOCALLY KNOWN AS PINE RIVER)

LOCATION.--Lat 37°22'58", long 107°34'37", in SW¼ sec.18, T.36 N., R.6 W., La Plata County, Hydrologic Unit 14080101, on left side of outlet flume from Vallecito Reservoir, 0.4 mi (0.6 km) upstream from Jack Creek, 2.0 mi (3.2 km) upstream from Red Creek, and 11 mi (18 km) north of Bayfield.

DRAINAGE AREA.--270 mi² (700 km²), approximately.

PERIOD OF RECORD.--October 1927 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder and concrete weir. Datum of gage is 7,582.54 ft (2,311.158 m), National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation). See WSP 1713 or 1733 for history of changes prior to Aug. 18, 1956.

REMARKS.--Records good. Flow regulated by Vallecito Reservoir (station 09353000) since April 1941. Transmountain diversions above station by Weminuche Pass and Pine River-Weminuche Pass ditches (see elsewhere in this report).

COOPERATION.--Gage-height record is furnished by Pine River Irrigation District.

AVERAGE DISCHARGE (REVISED).--13 years (water years 1928-40), 345 ft³/s (9.770 m³/s), 250,000 acre-ft/yr (308 hm³/yr), prior to completion of Vallecito Reservoir. 38 years (water years 1941-78), 345 ft³/s (9.770 m³/s), 250,000 acreft/yr (308 hm³/yr), subsequent to completion of Vallecito Reservoir.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,800 ft³/s (391 m³/s) July 27, 1957, gage height, 12.2 ft (3.72 m), from floodmarks at supplementary gage, from rating curve extended above 2,500 ft³/s (71 m³/s), on basis of slope-area measurement of peak flow (result of automatic spillway gates releasing from Vallecito Reservoir); minimum daily, 3.2 ft³/s (0.091 m³/s) Feb. 11, 1951 (result of storage in Vallecito Reservoir); minimum daily prior to construction of Vallecito Reservoir, 38 ft³/s (1.08 m³/s) Dec. 21, 22, 1937.

EXTREMES OUTSIDE PERIOD OF RECORD.--Greatest flood since at least 1885 occurred Oct. 5, 1911.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,650 ft³/s (46.7 m³/s) June 10, gage height, 3.64 ft (1.109 m); minimum daily, 21 ft³/s (0.59 m³/s) Dec. 25 to Mar. 2, Mar. 28 to Apr. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	83	35	24	21	21	21	21	91	557	748	694	623
2	83	35	22	21	21	21	21	102	607	716	694	608
3	83	35	22	21	21	22	21	78	632	715	689	599
4	83	35	22	21	21	22	21	60	644	715	689	594
5	79	35	22	21	21	22	21	51	644	723	684	589
6	64	31	22	21	21	22	21	32	656	736	684	589
7	50	58	22	21	21	22	21	22	683	731	684	584
8	49	77	22	21	21	22	21	22	700	736	679	580
9	49	77	22	21	21	22	21	22	700	736	679	580
10	51	77	22	21	21	22	21	22	729	717	679	575
11	51	77	22	21	21	22	21	22	802	705	689	575
12	51	44	22	21	21	22	21	22	977	705	634	570
13	51	24	22	21	21	22	21	22	1220	701	584	565
14	53	24	22	21	21	22	21	56	1240	684	584	565
15	53	24	22	21	21	22	21	79	1110	689	584	560
16	66	26	22	21	21	22	21	94	1220	694	610	556
17	105	26	22	21	21	22	21	136	1320	694	623	529
18	91	26	22	21	21	22	21	172	1190	694	650	518
19	72	26	22	21	21	22	21	243	991	697	680	507
20	92	26	22	21	21	22	21	282	851	710	684	500
21	102	26	22	21	21	22	21	298	809	705	679	496
22	102	26	22	21	21	22	21	298	793	705	679	482
23	110	26	22	21	21	22	22	318	781	705	679	469
24	115	26	22	21	21	23	22	334	781	705	674	465
25	115	26	21	21	21	23	22	372	774	700	655	456
26	112	26	21	21	21	23	22	425	770	700	638	434
27	112	26	21	21	21	22	22	439	770	694	633	418
28	112	26	21	21	21	21	22	440	770	700	633	414
29	112	26	21	21	---	21	22	465	770	700	628	414
30	64	26	21	21	---	21	58	501	756	700	628	409
31	35	---	21	21	---	21	---	542	---	694	623	---
TOTAL	2450	1078	677	651	588	679	674	6062	25247	21954	20326	15823
MEAN	79.0	35.9	21.8	21.0	21.0	21.9	22.5	196	842	708	656	527
MAX	115	77	24	21	21	23	58	542	1320	748	694	623
MIN	35	24	21	21	21	21	21	22	557	684	584	409
AC-FT	4860	2140	1340	1290	1170	1350	1340	12020	50080	43550	40320	31380

CAL YR 1977 TOTAL 63577 MEAN 174 MAX 589 MIN 21 AC-FT 126100
WTR YR 1978 TOTAL 96209 MEAN 264 MAX 1320 MIN 21 AC-FT 190800

09354500 LOS PINOS RIVER AT LA BOCA, CO

LOCATION.--Lat 37°00'34", long 107°35'56", in NE¼NW¼ sec.22, T.32 N., R.7 W., La Plata County, Hydrologic Unit 14080101, on downstream end of right abutment of the Denver & Rio Grande Western Railroad Co. bridge, at southeast edge of La Boca, 0.1 mi (0.2 km) upstream from Spring Creek, and 13 mi (21 km) upstream from mouth.

DRAINAGE AREA.--510 mi² (1,320 km²), approximately.

PERIOD OF RECORD.--October 1950 to current year. Monthly discharge only for some periods, published in WSP 1733.

GAGE.--Water-stage recorder. Datum of gage is 6,143.58 ft (1,872.563 m), National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter period, which are poor. Flow regulated by Vallecito Reservoir (station 09353000) 24 mi (39 km) upstream since April 1941. Diversions for irrigation of about 33,000 acres (130 km²) above station. Several observations of water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--28 years, 198 ft³/s (5.607 m³/s), 143,500 acre-ft/yr (177 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,400 ft³/s (181 m³/s) July 27, 1957, gage height, 8.95 ft (2.728 m), from rating curve extended above 5,100 ft³/s (140 m³/s); minimum daily, 6.1 ft³/s (0.17 m³/s) May 1, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--A major flood occurred Oct. 5, 1911, at this location.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 932 ft³/s (26.4 m³/s) June 14, gage height, 5.39 ft (1.643 m); minimum daily, 23 ft³/s (0.65 m³/s) Dec. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52	54	36	30	38	89	289	117	76	204	160	170
2	45	52	40	28	34	146	340	127	83	184	155	171
3	45	52	39	32	33	263	234	130	85	153	151	156
4	46	55	35	39	34	244	184	85	85	147	150	156
5	48	58	34	34	36	264	180	73	92	145	146	149
6	51	60	33	31	43	260	170	122	88	122	143	137
7	57	70	36	26	42	231	174	168	103	134	150	137
8	46	56	34	28	47	245	202	146	110	145	155	136
9	39	45	32	33	39	245	206	138	111	169	139	140
10	37	45	34	38	47	209	179	143	104	172	158	144
11	38	47	33	35	52	181	151	127	166	187	157	146
12	37	47	33	31	42	203	168	119	338	168	165	141
13	35	48	33	28	36	101	180	125	634	160	173	135
14	41	48	39	29	36	96	174	130	818	144	165	139
15	47	47	43	32	37	51	161	114	699	138	97	150
16	42	46	38	34	41	38	155	109	634	143	108	143
17	41	43	34	37	36	84	149	92	840	149	92	197
18	47	43	38	35	31	232	127	79	810	133	100	179
19	47	43	33	37	30	256	124	75	610	136	120	170
20	39	52	28	36	34	270	123	72	383	139	133	156
21	39	46	23	36	35	247	124	139	261	139	166	149
22	43	46	44	34	35	236	122	114	203	139	280	142
23	43	44	57	36	35	276	115	90	183	146	247	139
24	40	42	45	33	37	231	116	86	178	137	221	159
25	42	41	34	30	37	186	121	82	183	140	207	194
26	57	40	34	32	40	171	119	74	158	139	195	175
27	59	40	44	34	43	178	126	77	158	132	177	154
28	64	40	36	40	51	187	122	89	178	132	172	149
29	64	38	39	38	---	150	112	83	222	148	165	142
30	84	38	37	40	---	192	115	76	253	129	172	139
31	70	---	34	45	---	212	---	71	---	143	159	---
TOTAL	1485	1426	1132	1051	1081	5974	4862	3272	8846	4596	4978	4594
MEAN	47.9	47.5	36.5	33.9	38.6	193	162	106	295	148	161	153
MAX	84	70	57	45	52	276	340	168	840	204	280	197
MIN	35	38	23	26	30	38	112	71	76	122	92	135
AC-FT	2950	2830	2250	2080	2140	11850	9640	6490	17550	9120	9870	9110

CAL YR 1977 TOTAL 20168.8 MEAN 55.3 MAX 336 MIN 6.1 AC-FT 40000
WTR YR 1978 TOTAL 43297.0 MEAN 119 MAX 840 MIN 23 AC-FT 85880

09357500 ANIMAS RIVER AT HOWARDSVILLE, CO

LOCATION.--Lat 37°49'59", long 107°35'56", San Juan County, Hydrologic Unit 14080104, on right bank 1,000 ft (300 m) downstream from bridge on State Highway 110, 0.4 mi (0.6 km) southwest of Howardsville, and 0.4 mi (0.6 km) downstream from Cunningham Creek.

DRAINAGE AREA.--55.9 mi² (145 km²).

PERIOD OF RECORD.--October 1935 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Datum of gage is 9,616.98 ft (2,931.256 m), National Geodetic Vertical Datum of 1929. Prior to Aug. 18, 1939, at datum 1.00 ft (0.305 m) higher.

REMARKS.--Records good except those for winter period, which are fair. No diversion above station.

COOPERATION.--Records collected and computed by Colorado Division of Water Resources and reviewed by Geological Survey.

AVERAGE DISCHARGE.--43 years, 101 ft³/s (2.860 m³/s), 73,170 acre-ft/yr (90.2 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,980 ft³/s (56.1 m³/s) June 18, 1949, gage height, 4.36 ft (1.329 m), from rating curve extended above 950 ft³/s (27 m³/s); maximum gage height, 5.24 ft (1.597 m) Feb. 18, 1958 (backwater from snowslide); minimum daily discharge, 9.0 ft³/s (0.25 m³/s) Jan. 10, 1957, Feb. 15, Mar. 9, 1964, Feb. 13, 1965.

EXTREMES OUTSIDE PERIOD OF RECORD.--Greatest flood since at least 1885 occurred Oct. 5, 1911.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,220 ft³/s (34.6 m³/s) at 2000 June 14, gage height, 3.73 ft (1.137 m), only peak above base of 700 ft³/s (20 m³/s); minimum daily, 10 ft³/s (0.28 m³/s) Feb. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	19	17	16	13	13	24	78	388	425	108	37
2	29	20	18	16	12	13	22	69	425	420	98	36
3	29	20	18	16	12	13	22	64	450	392	92	33
4	29	20	18	16	13	12	22	60	430	349	81	32
5	29	20	17	16	13	12	22	52	392	313	76	31
6	30	20	18	15	13	12	23	50	401	293	73	31
7	43	20	18	15	13	12	27	45	495	285	71	33
8	37	20	17	15	13	12	29	41	546	282	69	32
9	33	18	17	15	12	12	29	40	651	293	66	30
10	33	18	17	14	12	12	28	50	728	309	64	29
11	30	18	17	14	13	12	30	58	686	325	62	29
12	27	18	17	14	13	12	38	71	749	321	63	28
13	29	18	17	14	12	12	41	98	777	285	68	27
14	29	18	17	14	11	12	38	152	904	257	63	27
15	29	18	17	14	10	12	38	229	904	250	57	27
16	29	18	17	14	11	12	40	282	791	268	54	27
17	28	18	17	14	11	13	39	278	644	260	52	28
18	27	18	17	14	11	13	37	205	594	301	50	28
19	27	18	17	14	11	13	37	199	630	244	50	29
20	27	18	17	14	12	13	43	223	630	232	46	27
21	27	18	17	14	12	13	50	223	644	214	46	26
22	27	19	17	14	12	14	49	208	637	185	52	26
23	27	19	17	14	12	13	49	254	624	168	52	25
24	24	19	17	14	12	13	58	282	707	160	45	25
25	24	18	17	14	12	13	78	285	749	145	45	25
26	24	18	17	14	13	13	98	271	600	136	43	24
27	24	18	16	14	13	14	110	278	546	130	40	24
28	24	18	16	14	13	15	95	241	546	128	37	24
29	24	18	16	14	---	16	90	282	480	122	37	23
30	24	17	16	14	---	17	86	365	425	116	36	23
31	19	---	16	14	---	21	---	401	---	114	36	---
TOTAL	872	557	527	448	340	409	1392	5434	18173	7722	1832	846
MEAN	28.1	18.6	17.0	14.5	12.1	13.2	46.4	175	606	249	59.1	28.2
MAX	43	20	18	16	13	21	110	401	904	425	108	37
MIN	19	17	16	14	10	12	22	40	388	114	36	23
AC-FT	1730	1100	1050	889	674	811	2760	10780	36050	15320	3630	1680

CAL YR 1977 TOTAL 16779 MEAN 46.0 MAX 317 MIN 10 AC-FT 33280
WTR YR 1978 TOTAL 38552 MEAN 106 MAX 904 MIN 10 AC-FT 76470

NOTE.--NO GAGE-HEIGHT RECORD FEB. 2 TO MAR. 21.

09361000 HERMOSA CREEK NEAR HERMOSA, CO

LOCATION.--Lat 37°25'19", long 107°50'40", in NE¼NW¼ sec.3, T.36 N., R.9 W., La Plata County, Hydrologic Unit 14080104, on right bank 20 ft (6 m) downstream from private bridge, 0.8 mi (1.3 km) northwest of Hermosa, and 2.2 mi (3.5 km) upstream from mouth.

DRAINAGE AREA.--172 mi^2 (445 km^2).

PERIOD OF RECORD.--November and December 1911 (gage heights and discharge measurements only), January 1912 to September 1914, October 1919 to September 1928, October 1939 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1313: 1927(M).

GAGE.--Water-stage recorder. Datum of gage is 6,705.88 ft (2,043.952 m), National Geodetic Vertical Datum of 1929. Prior to September 1914, nonrecording gage, and April 1920 to September 1928, water-stage recorder (nonrecording gage for short periods), within 0.5 mi (0.8 km) at different datums.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of a few hay meadows above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--50 years (water years 1913-14, 1920-28, 1940-78), 134 ft^3/s (3.795 m^3/s), 97,080 acre-ft/yr (120 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,980 ft^3/s (84.4 m^3/s) May 12, 1941, gage height, 6.02 ft (1.835 m); maximum gage height, 8.50 ft (2.591 m) Sept. 12, 1927, from floodmarks, site and datum then in use; minimum daily discharge, 4.0 ft^3/s (0.11 m^3/s) Dec. 9, 1956.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,050 ft^3/s (29.7 m^3/s) May 16, gage height, 3.41 ft (1.039 m), only peak above base of 800 ft^3/s (23 m^3/s); minimum daily, 9.0 ft^3/s (0.25 m^3/s) Dec. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	13	14	11	12	15	205	288	740	119	47	22
2	13	12	13	11	13	16	156	250	704	106	36	21
3	13	13	13	11	13	16	122	240	680	98	35	20
4	13	13	13	11	13	16	113	250	669	89	31	19
5	13	13	12	12	13	18	124	234	636	82	30	19
6	14	15	13	12	14	18	134	213	585	77	29	19
7	21	18	13	12	13	18	171	198	570	71	28	19
8	19	16	13	12	13	18	205	191	570	66	27	20
9	14	12	13	12	14	20	175	210	585	64	27	19
10	14	13	13	12	14	22	156	263	625	64	29	19
11	13	14	13	12	13	23	188	321	620	66	31	18
12	12	13	13	12	13	24	280	398	570	59	27	15
13	13	13	12	12	13	22	321	466	550	55	28	14
14	14	13	12	11	13	23	263	610	525	50	27	14
15	13	13	12	12	13	24	237	836	505	48	26	15
16	11	13	12	13	13	24	260	941	457	49	23	14
17	11	13	12	13	13	24	247	866	385	49	23	18
18	11	13	11	13	13	28	218	647	333	63	23	22
19	11	14	10	12	13	34	226	610	313	50	22	19
20	11	13	9.0	12	12	36	250	636	288	45	22	18
21	11	12	11	12	11	40	288	686	260	44	23	16
22	11	13	11	12	12	55	284	636	240	40	28	16
23	12	13	11	12	13	59	267	704	221	38	27	15
24	12	13	11	11	14	59	313	740	208	40	25	16
25	12	14	11	10	14	59	369	716	196	39	24	19
26	12	14	10	11	15	71	398	674	175	37	23	18
27	12	14	11	12	14	89	402	664	156	36	22	17
28	11	14	11	12	14	106	381	570	154	38	20	23
29	12	14	11	12	---	103	357	560	152	45	21	19
30	14	14	11	12	---	134	321	636	136	37	25	16
31	14	---	12	12	---	154	---	716	---	37	22	---
TOTAL	400	405	367.0	366	368	1368	7431	15970	12808	1801	831	539
MEAN	12.9	13.5	11.8	11.8	13.1	44.1	248	515	427	58.1	26.8	18.0
MAX	21	18	14	13	15	154	402	941	740	119	47	23
MIN	11	12	9.0	10	11	15	113	191	136	36	20	14
AC-FT	793	803	728	726	730	2710	14740	31680	25400	3570	1650	1070

CAL YR 1977 TOTAL 6567.2 MEAN 18.0 MAX 63 MIN 7.2 AC-FT 13030
WTR YR 1978 TOTAL 42654.0 MEAN 117 MAX 941 MIN 9.0 AC-FT 84600

09361500 ANIMAS RIVER AT DURANGO, CO

LOCATION.--Lat 37°16'45", long 107°52'47", in SW¼SW¼ sec.20, T.35 N., R.9 W., La Plata County, Hydrologic Unit 14080104, on left bank at Western Colorado Power Co.'s plant at Durango, 0.8 mi (1.3 km) upstream from Lightner Creek.

DRAINAGE AREA.--692 mi² (1,792 km²).

PERIOD OF RECORD.--June to December 1895, April 1896 to December 1898, April 1899 to December 1900, March to May 1901, April to November 1902, March to April 1903 (gage heights only, erroneously stated as discredited in WSP 1563), May to October 1903, July 1904 to December 1905, January to December 1910 (gage heights only), January to September 1911, January 1912 to current year. Monthly or yearly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 764: Drainage area. WSP 929: 1927(M). WSP 1243: 1911, 1918(M). WSP 1563: 1911-25 (monthly figures only).

GAGE.--Water-stage recorder. Datum of gage is 6,501.57 ft (1,981.679 m), National Geodetic Vertical Datum of 1929. See WSP 1713 or 1733 for history of changes prior to Mar. 2, 1921.

REMARKS.--Records good. Diversions for irrigation of about 4,000 acres (16 km²) above station. Natural regulation by many lakes and regulation for power above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--73 years (water years 1897-1900, 1905, 1911-78), 832 ft³/s (23.56 m³/s), 602,800 acre-ft/yr (743 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25,000 ft³/s (708 m³/s) Oct. 5, 1911, gage height, 11 ft (3.4 m), present site and datum, from rating curve extended above 13,000 ft³/s (370 m³/s); minimum daily, 94 ft³/s (2.66 m³/s) Mar. 2, 1913.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1885, that of Oct. 5, 1911.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,080 ft³/s (144 m³/s) June 16, gage height, 6.02 ft (1.835 m), only peak above base of 4,000 ft³/s (110 m³/s); minimum daily, 150 ft³/s (4.25 m³/s) Dec. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	221	190	173	167	173	190	830	1190	3590	1830	570	224
2	212	182	180	165	167	175	790	1080	3690	1760	514	221
3	212	185	185	163	163	180	637	980	3640	1700	490	218
4	209	185	173	180	169	178	570	1010	3670	1540	443	215
5	203	188	171	178	173	178	586	950	3480	1370	415	206
6	206	190	169	175	178	178	586	890	3260	1240	394	200
7	246	209	167	169	175	180	646	830	3500	1160	368	188
8	350	200	171	169	175	185	770	780	3610	1140	356	182
9	295	192	169	165	169	188	760	790	3990	1090	338	182
10	266	178	167	175	178	200	673	890	4480	1200	326	180
11	250	185	167	178	178	198	673	1020	4440	1270	332	182
12	234	195	165	175	167	200	930	1200	4310	1310	326	185
13	221	188	167	171	167	198	1140	1420	4330	1240	320	182
14	218	182	165	167	167	200	1060	1930	4420	1080	320	182
15	215	190	167	175	169	192	980	2770	4620	1000	305	182
16	209	185	173	188	173	185	1000	3430	4620	1040	290	182
17	209	180	165	178	163	185	980	3560	3770	1070	275	188
18	209	180	163	171	165	195	840	2580	3240	1190	262	190
19	206	180	165	171	165	206	840	2250	3060	1100	250	198
20	215	192	160	169	167	215	900	2350	3240	960	246	215
21	212	175	150	175	171	230	1030	2510	3080	910	238	206
22	212	180	165	169	167	250	1080	2260	3060	840	270	203
23	212	185	180	171	167	280	1030	2470	2940	760	300	203
24	209	178	182	178	175	275	1090	2710	3020	730	290	203
25	206	182	180	170	180	275	1330	2850	3210	700	295	206
26	198	182	173	170	185	280	1450	2650	2860	646	300	215
27	198	180	169	171	182	310	1800	2790	2280	602	262	230
28	195	180	178	171	185	374	1560	2350	2250	586	234	227
29	200	178	178	173	---	415	1390	2320	2230	610	224	224
30	200	175	171	173	---	490	1300	2880	1910	586	242	224
31	195	---	178	175	---	594	---	3400	---	637	227	---
TOTAL	6843	5551	5286	5345	4813	7579	29251	61090	103800	32897	10022	6043
MEAN	221	185	171	172	172	244	975	1971	3460	1061	323	201
MAX	350	209	185	188	185	594	1800	3560	4620	1830	570	230
MIN	195	175	150	163	163	175	570	780	1910	586	224	180
AC-FT	13570	11010	10480	10600	9550	15030	58020	121200	205900	65250	19880	11990

CAL YR 1977 TOTAL 107051 MEAN 293 MAX 1220 MIN 129 AC-FT 212300
WTR YR 1978 TOTAL 278520 MEAN 763 MAX 4620 MIN 150 AC-FT 552400

09363050 FLORIDA RIVER BELOW FLORIDA FARMERS DITCH, NEAR DURANGO, CO

LOCATION.--Lat 37°17'42", long 107°47'28", in SW¼SW¼ sec.18, T.35 N., R.8 W., La Plata County, Hydrologic Unit 14080104, on right bank 30 ft (9 m) downstream from diversion dam for Florida Farmers ditch and 4.0 mi (6.4 km) east of Riverview School in Durango.

DRAINAGE AREA.--108 mi² (280 km²).

PERIOD OF RECORD.--October 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 7,065.35 ft (2,153.519 m), National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation).

REMARKS.--Records good except those for winter period, which are fair. Flow regulated by Lemon Reservoir, capacity, 40,100 acre-ft (49.4 hm³). Diversions above station for irrigation above and below station and for municipal supply of Durango. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--11 years, 31.6 ft³/s (0.895 m³/s), 22,890 acre-ft/yr (28.2 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,100 ft³/s (31.2 m³/s) May 19, 1973, gage height, 5.70 ft (1.737 m); minimum daily, 0.70 ft³/s (0.020 m³/s) Oct. 14, 1968, Oct. 17, 1973.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 50 ft³/s (1.42 m³/s) Apr. 1, gage height, 2.33 ft (0.710 m); maximum gage height, 235 ft (0.716 m) Aug. 22; minimum daily, 0.90 ft³/s (0.025 m³/s) Oct. 13, 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.7	2.0	3.0	5.2	5.5	7.5	48	14	15	10	7.0	6.2
2	2.7	2.2	3.0	5.0	5.5	8.3	43	12	15	9.5	6.8	6.0
3	2.7	2.7	2.1	5.8	6.0	9.1	41	14	18	9.5	6.0	5.8
4	4.5	2.8	1.3	5.5	6.0	8.3	39	14	17	9.5	5.6	5.8
5	5.2	3.0	1.3	5.5	5.5	8.3	39	14	18	8.3	5.5	5.8
6	4.3	4.1	1.2	5.5	5.5	8.7	40	18	20	6.8	5.2	5.2
7	5.5	5.5	1.2	5.5	5.5	7.9	42	26	20	6.2	5.2	4.1
8	3.7	4.8	2.0	5.5	5.5	8.3	42	28	20	5.8	5.5	4.1
9	1.6	4.1	4.6	5.5	5.8	9.1	37	30	20	7.0	5.8	3.9
10	1.0	4.3	5.2	5.5	6.0	9.9	35	34	20	8.3	6.5	3.9
11	1.0	4.6	5.2	5.5	6.0	8.7	35	34	19	6.2	6.2	4.8
12	1.0	4.6	5.0	5.5	6.0	9.1	39	34	18	4.6	6.0	6.2
13	.90	4.6	3.9	5.5	6.2	7.9	39	32	18	4.6	5.8	6.2
14	.90	4.8	4.6	5.0	6.5	8.7	36	32	18	5.8	5.8	6.2
15	1.4	4.8	5.8	5.5	6.5	8.3	34	32	18	7.0	6.2	6.2
16	1.7	4.8	5.2	6.0	7.0	8.3	35	21	18	6.5	7.0	5.5
17	1.7	4.8	4.1	6.0	7.2	9.5	32	16	18	5.8	7.0	5.2
18	2.1	4.8	6.0	6.0	7.5	10	29	16	18	5.8	7.0	4.1
19	2.4	4.1	4.8	5.5	7.5	11	28	18	16	6.5	7.0	3.2
20	2.5	4.1	3.7	5.5	7.5	13	27	18	12	7.0	7.0	3.0
21	2.4	3.7	3.5	5.0	7.5	15	27	17	12	7.0	7.0	2.7
22	2.1	3.9	4.6	5.0	7.5	19	26	16	11	7.0	11	2.5
23	2.0	3.9	6.0	5.5	7.5	21	25	15	11	7.0	4.3	2.4
24	2.0	3.5	6.0	5.0	7.5	22	24	14	11	7.0	4.3	2.2
25	2.0	4.1	6.0	5.5	7.5	23	25	14	11	7.0	5.0	2.4
26	1.8	4.1	5.8	5.5	7.0	26	26	15	10	7.5	6.2	2.2
27	1.8	4.3	6.0	5.5	7.2	29	27	14	11	8.7	6.2	2.2
28	1.8	4.1	6.2	5.5	7.2	30	25	13	11	8.7	6.8	2.2
29	2.0	3.2	6.2	5.5	---	32	24	12	11	8.7	6.5	2.2
30	2.1	3.5	6.2	5.5	---	36	23	14	11	8.7	6.2	2.2
31	2.0	---	6.0	5.5	---	40	---	16	---	7.5	6.2	---
TOTAL	71.50	120.0	135.7	169.5	183.6	472.9	992	617	466	225.5	194.0	124.6
MEAN	2.31	4.00	4.38	5.47	6.56	15.3	33.1	19.9	15.5	7.27	6.26	4.15
MAX	5.5	5.5	6.2	6.0	7.5	40	48	34	20	10	11	6.2
MIN	.90	2.0	1.2	5.0	5.5	7.5	23	12	10	4.6	4.3	2.2
AC-FT	142	238	269	336	364	938	1970	1220	924	447	385	247

CAL YR 1977 TOTAL 1526.30 MEAN 4.18 MAX 13 MIN .90 AC-FT 3030
WTR YR 1978 TOTAL 3772.30 MEAN 10.3 MAX 48 MIN .90 AC-FT 7480

09363100 SALT CREEK NEAR OXFORD, CO

LOCATION.--Lat 37°08'23", long 107°45'10", in NE¼NE¼ sec.6, T.33 N., R.8 W., La Plata County, Hydrologic Unit 14080104, on right bank 2.9 mi (4.7 km) upstream from mouth, 3.0 mi (4.8 km) southwest of Oxford, and 11 mi (18 km) southeast of Durango.

DRAINAGE AREA.--16.7 mi² (43.3 km²).

PERIOD OF RECORD.--October 1956 to September 1963, October 1967 to current year.

REVISED RECORDS.--WSP 1925: 1960.

GAGE.--Water-stage recorder. Altitude of gage is 6,470 ft (1,972 m), from topographic map. Prior to October 1967, at site 0.2 mi (0.3 km) upstream at different datum.

REMARKS.--Records good except those for winter period, which are poor. Most of flow is return flow from areas irrigated by water imported from Los Pinos River. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--18 years, 11.8 ft³/s (0.334 m³/s), 8,550 acre-ft/yr (10.5 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 811 ft³/s (23.0 m³/s) Oct. 19, 1972, gage height, 5.24 ft (1.597 m), from rating curve extended above 200 ft³/s (5.7 m³/s), on basis of slope-area measurements at gage heights 3.54 and 5.24 ft (1.079 and 1.597 m); no flow at times in 1959-60, 1962, 1977, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 152 ft³/s (4.30 m³/s) Mar. 20, gage height, 3.75 ft (1.143 m); no flow Oct. 1 to 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	2.2	.04	.08	.16	2.6	2.2	.53	3.8	32	29	18
2	.00	.82	.04	.04	.12	3.0	7.5	1.0	8.5	29	28	16
3	.00	.21	.05	.08	.10	6.0	2.7	.96	10	24	32	14
4	.00	.11	.09	.10	.12	11	1.6	.39	11	21	31	15
5	.00	.11	.07	.12	.14	11	.96	.46	13	20	30	17
6	.00	.23	.05	.12	.18	15	.82	1.0	16	20	28	17
7	.00	2.0	.04	.10	.18	21	.75	1.9	16	20	28	18
8	.00	1.2	.05	.08	.18	24	.68	1.4	18	18	32	22
9	.00	.15	.05	.08	.18	27	.89	.68	23	17	29	21
10	.00	.11	.04	.12	.20	19	.75	.23	19	19	34	20
11	.00	.09	.04	.14	.20	24	.60	.19	19	20	26	22
12	.00	.11	.04	.10	.14	23	.46	9.7	17	20	22	22
13	.00	.11	.04	.06	.14	10	.32	.60	19	23	20	24
14	.00	.09	.03	.04	.14	7.0	.32	.82	17	25	15	27
15	.00	.09	.03	.08	.14	3.8	.32	.96	14	24	14	29
16	.00	.07	.05	.10	.16	3.5	.25	.96	15	25	16	30
17	.00	.07	.04	.12	.18	23	.21	1.5	18	26	16	40
18	.00	.11	.04	.12	.12	61	.19	3.5	16	22	16	28
19	.00	.10	.05	.12	.16	59	.19	3.0	15	20	17	22
20	.00	.10	.04	.12	.18	75	.23	3.8	14	20	16	21
21	.01	.10	.03	.12	.20	60	.23	5.5	13	19	17	20
22	.02	.10	.03	.10	.23	59	.23	4.4	9.9	14	26	20
23	.74	.11	.03	.10	.21	84	.21	4.2	13	16	29	20
24	.27	.11	.03	.06	.21	35	.23	4.1	15	20	24	23
25	.23	.13	.03	.06	.21	9.2	.23	5.1	20	22	24	26
26	1.2	.13	.03	.06	.23	3.0	.23	4.1	22	23	24	23
27	1.7	.15	.02	.10	.20	2.2	.19	4.0	24	24	23	20
28	2.5	.15	.04	.14	1.0	1.6	.17	4.7	22	20	25	19
29	3.2	.13	.06	.12	---	1.4	.17	3.6	28	22	24	19
30	5.5	.07	.06	.12	---	1.2	.25	3.6	41	24	22	18
31	5.5	---	.08	.16	---	1.0	---	3.0	---	27	20	---
TOTAL	20.87	9.26	1.36	3.06	5.61	686.5	24.08	79.88	510.2	676	737	651
MEAN	.67	.31	.044	.099	.20	22.1	.80	2.58	17.0	21.8	23.8	21.7
MAX	5.5	2.2	.09	.16	1.0	84	7.5	9.7	41	32	34	40
MIN	.00	.07	.02	.04	.10	1.0	.17	.19	3.8	14	14	14
AC-FT	41	18	2.7	6.1	11	1360	48	158	1010	1340	1460	1290

CAL YR 1977 TOTAL 586.87 MEAN 1.61 MAX 25 MIN .00 AC-FT 1160
WTR YR 1978 TOTAL 3404.82 MEAN 9.33 MAX 84 MIN .00 AC-FT 6750

NOTE.--NO GAGE-HEIGHT RECORD DEC. 29 TO FEB. 21.

09363200 FLORIDA RIVER AT BONDAD, CO

LOCATION.--Lat 37°03'24", long 107°52'09", in NE¼SW¼ sec.31, T.33 N., R.9 W., La Plata County, Hydrologic Unit 14080104, on left bank 20 ft (6 m) downstream from railroad trestle, 0.6 mi (1.0 km) upstream from mouth, 0.7 mi (1.1 km) northeast of Bondad, and 15 mi (24 km) south of Durango.

DRAINAGE AREA.--221 mi² (572 km²).

PERIOD OF RECORD.--October 1956 to September 1963, October 1967 to current year.

REVISED RECORDS.--WSP 1713: 1958.

GAGE.--Water-stage recorder. Altitude of gage is 6,000 ft (1,829 m), from topographic map. Prior to Sept. 11, 1958, at site 300 ft (91 m) upstream at datum 2.39 ft (0.728 m) higher.

REMARKS.--Records good except those for winter period, which are poor. Diversion for irrigation of about 20,000 acres (81 km²) above station. Flow regulated by Lemon Reservoir, capacity, 40,100 acre-ft (49.4 hm³) since November 1963. Most of flow is return flow from irrigated areas. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--7 years (water years 1957-63), 78.8 ft³/s (2.203 m³/s), 56,370 acre-ft/yr (69.5 hm³/yr), prior to completion of Lemon Reservoir; 11 years (water years 1968-78), 61.5 ft³/s (1.742 m³/s), 44,560 acre-ft/yr (54.9 hm³/yr), subsequent to completion of Lemon Reservoir.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,640 ft³/s (46.4 m³/s) Oct. 19, 1972, gage height, 6.30 ft (1.920 m), from rating curve extended above 1,100 ft³/s (31 m³/s), on basis of slope-area measurement of peak flow; minimum daily, 4.6 ft³/s (0.13 m³/s) July 24, 1959.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 229 ft³/s (6.49 m³/s) Mar. 20, gage height, 3.89 ft (1.186 m), from rating curve extended above 1,100 ft³/s (31 m³/s), on basis of slope-area measurement of peak flow; minimum daily discharge, 6.9 ft³/s (0.20 m³/s) Oct. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.2	14	14	13	17	37	78	31	12	43	42	32
2	6.9	13	14	12	13	42	86	31	11	39	42	29
3	7.2	11	14	12	14	58	70	28	13	36	42	28
4	7.8	11	14	12	17	57	61	23	14	32	42	26
5	7.5	13	14	12	14	63	61	25	18	31	41	25
6	8.7	15	14	13	18	66	56	30	23	30	40	26
7	10	18	14	13	19	63	55	43	23	30	40	28
8	9.8	18	15	13	20	69	56	44	23	33	38	29
9	8.4	16	13	13	18	68	57	44	25	30	39	30
10	9.0	16	11	13	19	62	54	44	25	30	42	30
11	8.4	16	11	13	22	57	50	44	26	34	41	29
12	8.7	16	12	13	20	70	50	50	25	33	34	30
13	8.7	16	12	13	18	51	52	43	25	33	32	35
14	8.7	16	12	13	16	46	50	41	25	32	25	38
15	8.7	16	12	13	18	36	49	39	24	35	25	40
16	9.0	16	12	14	22	33	47	31	24	34	25	40
17	9.4	16	11	14	22	41	46	23	25	41	26	50
18	9.4	16	11	14	16	78	44	18	25	38	25	54
19	9.8	17	11	13	15	111	42	18	23	35	27	41
20	10	18	11	13	18	134	40	21	24	35	28	42
21	9.0	17	12	12	18	144	39	28	24	33	27	39
22	9.8	16	12	12	20	152	38	25	23	31	35	39
23	9.8	16	12	13	21	175	37	22	23	30	39	37
24	10	16	12	13	22	134	36	20	25	36	37	42
25	11	15	12	13	23	106	36	22	30	38	34	47
26	10	16	11	12	25	76	36	20	32	38	34	45
27	10	16	11	12	26	73	36	18	35	37	34	44
28	11	16	12	13	28	70	36	16	37	37	35	42
29	12	15	12	13	---	66	33	14	33	35	36	42
30	14	13	12	14	---	65	31	11	54	36	36	42
31	14	---	12	15	---	62	---	9.8	---	41	32	---
TOTAL	293.9	464	382	401	539	2365	1462	876.8	749	1076	1075	1101
MEAN	9.48	15.5	12.3	12.9	19.3	76.3	48.7	28.3	25.0	34.7	34.7	36.7
MAX	14	18	15	15	28	175	86	50	54	43	42	54
MIN	6.9	11	11	12	13	33	31	9.8	11	30	25	25
AC-FT	583	920	758	795	1070	4690	2900	1740	1490	2130	2130	2180

CAL YR 1977 TOTAL 5272.9 MEAN 14.4 MAX 62 MIN 5.2 AC-FT 10460
WTR YR 1978 TOTAL 10784.7 MEAN 29.5 MAX 175 MIN 6.9 AC-FT 21390

09365500 LA PLATA RIVER AT HESPERUS, CO

LOCATION.--Lat 37°17'23", long 108°02'24", in NE¼SW¼ sec.14, T.35 N., R.11 W., La Plata County, Hydrologic Unit 14080105, on right bank at Hesperus 700 ft (213 m) downstream from U.S. Highway 160.

DRAINAGE AREA.--37 mi² (96 km²), approximately.

PERIOD OF RECORD.--June to August 1904, May 1905 to September 1906, August to November 1910, June 1917 to current year. Monthly discharge only for some periods, published in WSP 1313. Records for Nov. 11 to Dec. 31, 1910, published in WSP 289, have been found to be unreliable and should not be used.

REVISED RECORDS.--WSP 1243: 1906(M). WSP 1563: 1923 (monthly figures only). See also PERIOD OF RECORD.

GAGE.--Water-stage recorder. Datum of gage is 8,104.71 ft (2,470.316 m), National Geodetic Vertical Datum of 1929. Prior to May 1, 1920, nonrecording gage, and May 1, 1920, to May 24, 1927, water-stage recorder, at several sites about 600 ft (180 m) downstream at different datums. May 25, 1927, to Sept. 30, 1938, water-stage recorder at site 60 ft (18 m) downstream and Oct. 1, 1938, to Sept. 30, 1941, at present site at datum 1.00 ft (0.305 m) higher.

REMARKS.--Records good except those for winter period, which are fair. Cherry Creek ditch exports water above station for irrigation of about 2,000 acres (8.09 km²) in Cherry Creek drainage. Several observations of water temperature were obtained and are published elsewhere in this report.

COOPERATION.--Records collected and computed by Colorado Division of Water Resources and reviewed by Geological Survey.

AVERAGE DISCHARGE.--62 years (water years 1906, 1918-78), 44.0 ft³/s (1.246 m³/s), 31,880 acre-ft/yr (39.3 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,880 ft³/s (53.2 m³/s) Sept. 22, 1941, gage height, 4.30 ft (1.311 m), present datum, from rating curve extended above 620 ft³/s (18 m³/s), on basis of slope-area measurement of peak flow; maximum gage height, 5.13 ft (1.564 m) Sept. 6, 1970; no flow part of Oct. 24, 1966, caused by filling of pond upstream.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum flood observed occurred Oct. 5, 1911.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 364 ft³/s (10.3 m³/s) at 0200 June 1, gage height, 3.75 ft (1.143 m), only peak above base of 230 ft³/s (6.5 m³/s); minimum daily, 2.5 ft³/s (0.071 m³/s) Feb. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.4	6.0	5.0	3.8	4.0	5.0	23	106	291	50	18	8.6
2	5.0	5.6	5.3	3.5	4.0	5.0	45	96	267	46	18	8.6
3	3.8	5.3	5.3	3.8	4.0	4.6	46	82	243	41	18	8.2
4	4.0	5.0	5.3	4.0	4.0	3.5	40	74	263	40	17	7.8
5	4.4	4.6	5.3	4.0	4.4	3.5	41	68	228	41	16	7.4
6	5.6	5.3	5.6	4.4	4.4	3.5	43	61	210	41	15	7.0
7	8.2	6.4	5.6	4.0	4.4	3.8	50	57	207	43	14	7.0
8	10	5.3	5.6	4.0	4.6	4.4	61	50	207	46	14	6.7
9	10	4.6	5.6	4.0	4.6	4.4	57	54	255	41	14	6.7
10	7.8	4.4	5.3	4.6	4.6	4.4	50	59	247	52	13	6.7
11	8.2	4.0	5.0	4.4	5.0	4.4	59	70	235	47	13	6.4
12	7.4	4.0	5.0	4.4	4.0	4.6	86	94	243	37	13	6.4
13	5.3	4.0	4.4	4.4	3.0	4.4	108	119	247	37	14	6.0
14	7.0	3.8	4.6	4.4	3.2	4.0	101	176	235	37	14	6.4
15	8.2	4.0	5.0	4.6	3.5	4.0	98	235	224	37	14	6.4
16	6.7	4.4	5.0	5.0	3.8	4.4	101	263	190	36	13	5.3
17	6.4	4.4	4.6	5.6	3.0	4.6	91	247	150	34	12	6.7
18	6.7	4.4	5.3	4.6	2.5	5.0	80	168	130	56	12	5.6
19	6.7	4.6	4.4	4.6	3.0	5.0	82	156	130	34	12	5.6
20	6.4	4.6	4.0	5.0	4.0	5.3	89	180	127	36	11	5.6
21	6.4	4.6	4.4	4.6	4.4	6.4	103	185	113	34	12	5.6
22	6.4	4.6	4.4	4.4	4.0	6.7	106	185	111	32	12	5.3
23	6.0	4.6	3.8	4.0	4.0	7.0	103	210	101	29	11	5.3
24	6.0	5.0	3.8	3.8	4.0	7.4	116	214	98	28	10	6.4
25	6.0	5.0	3.8	3.5	4.0	7.8	141	204	101	29	10	6.0
26	5.6	5.3	3.8	4.0	4.0	8.2	141	200	84	28	9.6	5.6
27	5.6	5.0	4.4	4.6	4.0	8.6	156	200	74	24	9.6	5.6
28	5.3	5.0	4.4	4.4	4.0	9.6	135	165	72	22	9.1	5.6
29	6.0	5.0	4.4	4.4	---	10	130	190	72	21	9.1	5.3
30	6.7	5.0	4.6	4.4	---	12	116	235	61	20	9.1	5.3
31	6.0	---	4.6	4.4	---	14	---	267	---	19	9.1	---
TOTAL	200.2	143.8	147.6	133.6	110.4	185.5	2598	4670	5216	1118	395.6	191.1
MEAN	6.46	4.79	4.76	4.31	3.94	5.98	86.6	151	174	36.1	12.8	6.37
MAX	10	6.4	5.6	5.6	5.0	14	156	267	291	56	18	8.6
MIN	3.8	3.8	3.8	3.5	2.5	3.5	23	50	61	19	9.1	5.3
AC-FT	397	285	293	265	219	368	5150	9260	10350	2220	785	379

CAL YR 1977 TOTAL 3413.6 MEAN 9.35 MAX 37 MIN 2.5 AC-FT 6770
WTR YR 1978 TOTAL 15109.8 MEAN 41.4 MAX 291 MIN 2.5 AC-FT 29970

09366500 LA PLATA RIVER AT COLORADO-NEW MEXICO STATE LINE

LOCATION.--Lat 36°59'51", long 108°11'17", in NW¼SE¼ sec.10, T.32 N., R.13 W., La Plata County, CO, Hydrologic Unit 14080105, on right bank at Colorado-New Mexico State line, 0.2 mi (0.3 km) downstream from Ponds Arroyo, and 4.8 mi (7.7 km) north of La Plata, NM.

DRAINAGE AREA.--331 mi² (857 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1920 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1313: 1934(M), 1936(M).

GAGE.--Water-stage recorder. Datum of gage is 5,975.15 ft (1,821.226 m), National Geodetic Vertical Datum of 1929. See WSP 1713 or 1733 for history of changes prior to Mar. 17, 1934.

REMARKS.--Records good except those for periods of no gage height record, which are fair. Diversions above station for irrigation of about 15,000 acres (60.7 km²), mostly above station.

COOPERATION.--Records collected and computed by Colorado Division of Water Resources and reviewed by Geological Survey.

AVERAGE DISCHARGE.--58 years, 33.0 ft³/s (0.935 m³/s), 23,910 acre-ft/yr (29.5 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,705 ft³/s (135 m³/s) Aug. 24, 1927, gage height, 11.36 ft (3.463 m), present datum, from rating curve extended above 750 ft³/s (21 m³/s), on basis of slope-area measurement of peak flow; no flow at times in many years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 300 ft³/s (8.50 m³/s) at 1000 May 17, gage height, 2.28 ft (0.695 m); no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	1.4	1.4	2.1	2.8	8.0	64	56	126	43	1.6	.15
2	.00	1.4	.30	1.7	2.8	10	79	67	114	36	1.2	.45
3	.00	1.4	.45	2.4	2.8	14	103	55	96	30	1.0	.30
4	.00	1.4	.15	2.4	2.8	10	91	41	90	26	.80	.15
5	.00	1.4	.10	2.4	2.9	12	86	36	70	23	.60	.05
6	.00	2.1	.10	2.1	2.9	10	84	40	47	26	.45	.05
7	.00	3.2	.10	1.8	3.2	8.5	92	51	53	25	.30	.15
8	.00	1.8	.10	1.8	3.5	7.0	111	53	75	24	.15	.05
9	.00	1.8	.10	2.4	2.9	6.6	116	51	92	24	.80	.00
10	.00	1.8	.10	2.1	3.2	6.6	103	48	87	25	2.6	.00
11	.00	1.8	.10	1.0	4.4	6.6	84	48	90	32	1.8	.00
12	.00	1.8	.10	.30	3.2	6.6	106	47	62	26	1.6	.00
13	.00	1.8	.10	.15	2.9	6.6	155	48	62	21	1.4	.00
14	.40	1.8	.30	1.5	2.9	5.1	155	73	63	18	.80	.00
15	.45	1.6	.45	4.9	2.6	4.8	143	143	86	16	1.4	.00
16	.45	1.6	.60	4.8	3.2	4.4	137	232	70	15	1.2	.00
17	.60	1.6	1.2	3.5	2.5	4.1	128	254	51	14	1.0	.00
18	.51	1.6	1.2	3.5	2.8	3.8	94	150	85	24	.45	.00
19	.05	1.8	1.2	3.5	2.8	3.8	84	83	106	22	.45	.00
20	.00	2.4	1.2	3.2	3.0	4.1	74	84	94	14	.45	.00
21	.00	2.4	1.5	2.9	3.9	4.1	72	100	70	13	.45	.00
22	.02	2.4	3.2	2.4	3.5	4.4	68	79	92	12	.60	.00
23	.48	2.1	3.5	3.2	3.8	7.0	60	99	58	13	1.4	.00
24	.00	1.8	3.5	3.4	3.5	10	60	100	69	14	1.6	.00
25	.00	1.8	2.3	1.8	3.8	21	78	96	83	13	1.2	.00
26	.00	1.8	2.3	2.4	4.1	27	75	79	70	11	1.0	.00
27	.00	1.8	2.9	2.5	4.1	35	79	80	51	9.5	.60	.00
28	.00	2.1	2.6	2.5	4.8	40	74	72	53	7.0	.45	.00
29	.01	1.8	2.6	2.9	---	34	64	54	63	6.2	.30	.00
30	.67	1.8	2.4	2.9	---	44	55	86	70	3.2	.45	.00
31	1.2	---	2.4	3.0	---	46	---	101	---	2.1	.30	---
TOTAL	4.84	55.3	38.55	77.45	91.6	415.1	2774	2606	2298	588.0	28.40	1.35
MEAN	.16	1.84	1.24	2.50	3.27	13.4	92.5	84.1	76.6	19.0	.92	.045
MAX	1.2	3.2	3.5	4.9	4.8	46	155	254	126	43	2.6	.45
MIN	.00	1.4	.10	.15	2.5	3.8	55	36	47	2.1	.15	.00
AC-FT	9.6	110	76	154	182	823	5500	5170	4560	1170	56	2.7

CAL YR 1977 TOTAL 1441.09 MEAN 3.95 MAX 291 MIN .00 AC-FT 2860
WTR YR 1978 TOTAL 8978.59 MEAN 24.6 MAX 254 MIN .00 AC-FT 17810

09366500 LA PLATA RIVER AT COLORADO-NEW MEXICO STATE LINE--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1977 to September 1978.

REMARKS.--Chemical data obtained on infrequent schedule from 1970 to 1973 water years.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI FECAL, (COLS. PER 100 ML)
NOV										
29...	1245	1.0	1360	8.1	3.0	4.7	11.4	--	>120	K17
DEC										
28...	0945	2.9	1400	8.0	.0	--	11.8	19	K15	78
JAN										
31...	0900	E3.0	1400	8.1	2.0	--	11.2	14	>120	55
MAR										
06...	1630	9.5	1700	7.9	11.0	--	9.3	9	350	>1000
APR										
03...	1215	106	760	7.1	10.0	--	9.2	110	220	670
25...	0815	74	650	8.0	8.0	--	9.5	27	110	110
MAY										
30...	0850	92	430	7.2	9.0	--	9.2	55	190	200
JUN										
27...	1300	54	590	8.0	19.0	--	7.8	11	240	88
AUG										
01...	1100	2.4	1000	7.5	20.0	--	7.5	16	240	460
29...	1040	.05	1250	8.6	16.0	--	7.9	41	230	100

DATE	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)
NOV										
29...	690	480	140	83	71	1.2	2.2	260	0	210
DEC										
28...	730	510	150	85	73	1.2	2.0	260	0	213
JAN										
31...	750	520	160	85	65	1.0	2.1	280	0	230
MAR										
06...	910	690	200	99	75	1.1	3.2	260	0	210
APR										
03...	380	250	88	38	26	.6	3.0	160	0	130
25...	350	230	79	37	27	.6	2.0	150	0	120
MAY										
30...	280	160	63	29	18	.5	1.7	140	0	115
JUN										
27...	270	150	64	27	17	.5	1.4	150	0	120
AUG										
01...	510	350	110	57	45	.9	--	200	0	160
29...	510	370	96	65	58	1.1	2.3	170	1	140

E ESTIMATED.

K BASED ON NON-IDEAL COLONY COUNT.

09366500 LA PLATA RIVER AT COLORADO-NEW MEXICO STATE LINE--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)
NOV										
29...	550	35	.4	12	1070	1020	1.46	2.89	.40	.01
DEC										
28...	550	34	.4	14	1080	1040	1.47	8.46	.54	.08
JAN										
31...	570	32	.3	13	1090	1070	1.48	6.47	.56	.02
MAR										
06...	730	43	.3	12	1370	1290	1.86	35.1	.51	.10
APR										
03...	270	11	.2	9.5	522	525	.71	149	.56	.03
25...	250	11	.2	8.7	478	489	.65	95.5	.32	.05
MAY										
30...	190	8.1	.3	7.8	382	387	.52	94.9	.12	.03
JUN										
27...	160	6.7	.2	9.7	369	360	.50	53.8	.00	.01
AUG										
01...	380	20	.3	7.7	771	721	1.05	1.05	.20	.10
29...	470	29	.3	9.2	871	815	1.18	.12	.01	.01

DATE	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	PHYTO-PLANK-TON, TOTAL (CELLS PER ML)
NOV										
29...	.16	.17	.57	.01	.01	70	30	--	--	1600
DEC										
28...	.67	.75	1.3	.00	.00	60	20	--	--	35
JAN										
31...	.20	.22	.78	.02	.01	50	20	3.8	--	280
MAR										
06...	.25	.35	.86	.05	.03	60	10	5.4	.3	1500
APR										
03...	3.3	3.3	3.9	.49	.02	70	70	--	1.4	5700
25...	.66	.71	1.0	.17	.00	40	20	13	--	160
MAY										
30...	.97	1.0	1.1	.33	.02	50	80	6.1	1.8	86
JUN										
27...	.20	.21	.21	.02	.01	40	30	2.5	.4	2500
AUG										
01...	.35	.36	.38	.20	.00	60	20	3.4	--	--
29...	.26	.27	.28	.01	.00	50	<10	3.7	.4	--

DATE	TIME	SOLIDS, RESIDUE AT 105 DEG. C, DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	BARIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS BA)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)
NOV											
29...	1245	1200	5	20	1	1	--	500	400	--	0
MAR											
06...	1630	--	--	0	--	1	1	--	200	1400	--
MAY											
30...	0850	--	--	30	2	1	--	200	0	--	0
AUG											
29...	1040	--	--	0	--	1	10	--	60	60	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	BERYL-LIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COBALT, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CO)
NOV 29...	0	--	0	0	--	10	10	--	0	0	--
MAR 06...	0	10	--	2	1	--	0	30	--	0	7
MAY 30...	0	--	1	1	--	5	0	--	6	0	--
AUG 29...	<1	1	--	<1	0	--	0	3	--	<1	6

DATE	COPPER, DIS-SOLVED (UG/L AS CU)	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB)	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MANGA-NESE, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)
NOV 29...	1	--	4	0	--	30	40	8	0	--	.0
MAR 06...	1	23	--	0	10	--	40	--	90	240	--
MAY 30...	10	--	12	2	--	10	2	310	10	--	.1
AUG 29...	2	10	--	4	5	--	30	--	2	110	--

DATE	MERCURY DIS-SOLVED (UG/L AS HG)	MERCURY RECOV. FM BOT-TOM MA-TERIAL (UG/L AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	MOLYB-DENUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	NICKEL, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SELE-NIUM, TOTAL IN BOT-TOM MA-TERIAL (UG/G)
NOV 29...	.0	--	3	2	--	3	0	--	3	3	--
MAR 06...	.0	.0	--	2	1	--	1	10	--	7	0
MAY 30...	.0	--	4	1	--	15	0	--	1	0	--
AUG 29...	.0	.0	--	4	4	--	0	2	--	1	0

DATE	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN)	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)
NOV 29...	.0	10	10	--	<19	<.4	5.3	.5	4.6	.5
MAR 06...	.0	--	10	25	--	--	--	--	--	--
MAY 30...	.0	70	20	--	5.5	21	2.6	21	2.2	20
AUG 29...	.0	--	<3	10	--	--	--	--	--	--

09366500 LA PLATA RIVER AT COLORADO-NEW MEXICO STATE LINE--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
NOV				
29...	1245	1.5	476	1.9
DEC				
28...	0945	2.4	15	.10
JAN				
30...	0900	2.2	23	.14
MAR				
06...	1630	7.5	68	1.4
APR				
25...	0815	74	319	64
MAY				
30...	0850	83	956	214
JUN				
27...	1300	56	60	9.1
AUG				
01...	1100	2.4	28	.18
29...	1040	.05	3	.00

09366500 LA PLATA RIVER AT COLORADO-NEW MEXICO STATE LINE--Continued

PHYTOPLANKTON DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	NOV 29.77		DEC 28.77		JAN 31.78		MAR 6.78	
TIME	1245		0945		0900		1630	
TOTAL CELLS/ML	1600		35		280		1500	
DIVERSITY: DIVISION	1.5		0.7		0.0		1.2	
.CLASS	1.5		0.7		0.0		1.2	
..ORDER	1.5		0.7		0.0		1.2	
...FAMILY	2.4		2.3		2.1		2.8	
....GENUS	2.4		2.3		2.3		2.8	
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)								
.CHLOROPHYCEAE								
..CHLOROCOCCALES								
...CHARACIACEAE								
....SCHROEDERIA	630#	40	--	-	--	-	--	-
...OOCYSTACEAE								
....ANKISTRODESMUS	16	1	--	-	--	-	--	-
...SCENEDESMACEAE								
....CRUCIGENIA	65	4	--	-	--	-	--	-
..VOLVOCALES								
...CHLAMYDOMONADACEAE								
....CHLAMYDOMONAS	--	-	7#	20	--	-	78	5
CHRYSOPHYTA								
.BACILLARIOPHYCEAE								
..CENTRALES								
...COSCINODISCACEAE								
....CYCLOTELLA	--	-	--	-	--	-	--	-
..PENNALES								
...ACHNANTHACEAE								
....ACHNANTHES	--	-	--	-	26	9	59	4
....COCCONEIS	--	-	--	-	--	-	--	-
....RHOICOSPHENIA	--	-	--	-	--	-	--	-
...CYMBELLACEAE								
....CYMBELLA	16	1	7#	20	72#	26	310#	21
...DIATOMA-EAE								
....DIATOMA	--	-	--	-	--	-	39	3
...FRAGILARIACEAE								
....SYNEDRA	160	10	7#	20	13	5	120	8
...GOMPHONEMATACEAE								
....GOMPHONEMA	--	-	--	-	--	-	--	-
...MERIDIONACEAE								
....MERIDION	--	-	--	-	--	-	--	-
...NAVICULACEAE								
....NAVICULA	49	3	--	-	52#	19	290#	20
....PINNULARIA	--	-	--	-	--	-	--	-
...NITZSCHIACEAE								
....DENTICULA	--	-	--	-	7	2	--	-
....NITZSCHIA	320#	21	7#	20	100#	37	160	11
...SURIRELLACEAE								
....SURIRELLA	65	4	7#	20	7	2	39	3
CYANOPHYTA (BLUE-GREEN ALGAE)								
.CYANOPHYCEAE								
..HORMOGONALES								
...OSCILLATORIACEAE								
....LYNGBYA	--	-	--	-	--	-	--	-
....OSCILLATORIA	240#	15	--	-	--	-	350#	24
EUGLENOPHYTA (EUGLENOIDS)								
.EUGLENOPHYCEAE								
..EUGLENALES								
...EUGLENACEAE								
....EUGLENA	--	-	--	-	--	-	--	-
....TRACHELOMONAS	--	-	--	-	--	-	20	1

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

09366500 LA PLATA RIVER AT COLORADO-NEW MEXICO STATE LINE--Continued

PHYTOPLANKTON DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	APR 3,78	APR 25,78	MAY 30,78	JUN 27,78
TIME	1215	0815	0850	1300
TOTAL CELLS/ML	5700	160	86	2500
DIVERSITY: DIVISION	0.9	1.1	0.0	1.0
.CLASS	0.9	1.1	0.0	1.0
..ORDER	0.9	1.1	0.0	1.1
...FAMILY	1.5	2.4	1.6	1.7
....GENUS	1.5	2.4	1.6	1.8

ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHLOROPHYTA (GREEN ALGAE)								
.CHLOROPHYCEAE								
..CHLOROCOCCALES								
...CHARACIACEAE								
....SCHROEDERIA	--	-	--	-	--	-	--	-
...OOCYSTACEAE								
....ANKISTRODESMUS	--	-	--	-	--	-	--	-
...SCENEDESMACEAE								
....CRUCIGENIA	--	-	--	-	--	-	--	-
..VOLVOCALES								
...CHLAMYDOMONADACEAE								
....CHLAMYDOMONAS	--	-	--	-	--	-	23	1
CHRYSOPHYTA								
.BACILLARIOPHYCEAE								
..CENTRALES								
...COSCINODISCACEAE								
....CYCLOTELLA	--	-	--	-	--	-	46	2
..PENNALES								
...ACHNANTHACEAE								
....ACHNANTHES	--	-	--	-	--	-	140	5
....COCCONEIS	--	-	--	-	--	-	46	2
....RHOICOSPHENIA	270	5	--	-	--	-	23	1
...CYMBELLACEAE								
....CYMBELLA	270	5	--	-	--	-	190	7
...DIATOMACEAE								
....DIATOMA	--	-	--	-	--	-	160	6
...FRAGILARIACEAE								
....SYNEDRA	540	10	60#	38	29#	33	--	-
...GOMPHONEMATACEAE								
....GOMPHONEMA	--	-	--	-	--	-	23	1
...MERIDIONACEAE								
....MERIDION	--	-	20	13	--	-	--	-
...NAVICULACEAE								
....NAVICULA	820	14	20	13	--	-	46	2
....PINNULARIA	--	-	--	-	29#	33	--	-
...NITZSCHIACEAE								
....DENTICULA	--	-	--	-	--	-	--	-
....NITZSCHIA	--	-	20	13	29#	33	93	4
...SURIRELLACEAE								
....SURIRELLA	--	-	--	-	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)								
.CYANOPHYCEAE								
..HORMOGONALES								
...OSCILLATORIACEAE								
....LYNGBYA	3800#	67	--	-	--	-	--	-
....OSCILLATORIA	--	-	20	13	--	-	1800#	69
EUGLENOPHYTA (EUGLENOIDS)								
.EUGLENOPHYCEAE								
..EUGLENALES								
...EUGLENACEAE								
....EUGLENA	--	-	20	13	--	-	--	-
....TRACHELOMONAS	--	-	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

09370800 MANCOS RIVER NEAR CORTEZ, CO

LOCATION.--Lat 37°06'27", long 108°27'43", in NE¼ sec.15, T.33 N., R.15 W., Ute Indian Reservation, Montezuma County, Hydrologic Unit 14080107, on right bank 0.8 mi (1.3 km) upstream from Johnson Canyon, 16 mi (26 km) southeast of Towaoc, and 18 mi (29 km) southeast of Cortez.

DRAINAGE AREA.--302 mi² (782 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1976 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,700 ft (1,737 m), from topographic map.

REMARKS.--Records good, except those for winter period and period of no gage-height record, which are poor. Flow regulated by Jackson Gulch Reservoir, capacity, 10,000 acre-ft (12.3 hm³) 20 mi (32 km) upstream on Jackson Gulch. Reservoir is fed by a 3-mi (4.8-km) long canal from West Mancos River. Diversions for irrigation of about 10,000 acres (40.5 km²) above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 580 ft³/s (16.4 m³/s) Aug. 1, 1976, gage height, 4.82 ft (1.469 m), from rating curve extended above 21 ft³/s (0.59 m³/s), on basis of step-backwater method; no flow many days each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 492 ft³/s (13.9 m³/s) May 17, gage height, 4.23 ft (1.289 m), from rating curve extended above 21 ft³/s (0.59 m³/s), on basis of step-backwater method; minimum daily, 0.10 ft³/s (0.003 m³/s) Oct. 2, 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.14	1.4	3.6	2.2	8.0	14	275	90	245	22	7.4	4.2
2	.10	1.1	4.0	1.2	6.0	30	221	97	251	22	7.0	4.5
3	.10	1.0	4.0	1.0	4.5	90	150	105	236	25	6.2	5.6
4	.12	.92	4.0	2.2	5.0	60	105	84	224	24	5.3	5.3
5	.12	.92	3.6	2.8	5.0	50	114	76	221	20	4.8	5.3
6	.16	1.3	3.4	2.8	9.0	50	110	103	209	18	5.6	4.8
7	1.8	2.2	3.4	2.8	10	46	110	140	182	17	5.3	4.8
8	1.9	3.8	3.4	1.6	12	40	165	130	182	13	4.2	5.6
9	1.0	2.5	3.4	1.2	9.5	46	140	118	182	13	3.6	5.9
10	.60	2.7	3.4	3.4	5.0	50	200	130	195	14	12	5.9
11	.60	2.9	3.2	3.4	14	40	100	118	188	16	6.7	7.0
12	.60	3.4	3.2	3.4	10	50	90	122	165	18	5.9	7.0
13	.68	2.9	3.0	3.0	7.5	44	120	136	150	18	7.0	6.7
14	.76	2.9	3.0	2.4	6.5	34	120	172	130	16	8.6	5.9
15	.76	3.2	3.0	4.4	7.0	30	100	242	126	14	8.6	7.4
16	.84	3.2	3.0	3.0	7.5	20	110	317	112	12	6.7	7.8
17	.84	3.1	3.0	4.2	6.0	18	130	388	89	13	6.7	9.8
18	.92	3.4	3.0	4.0	3.0	36	97	254	76	23	6.2	12
19	.84	3.4	3.0	3.2	5.0	70	99	206	65	21	5.0	12
20	.68	3.6	3.1	3.4	6.0	65	106	195	42	15	5.0	12
21	.76	3.4	2.9	3.6	8.0	160	128	203	31	13	5.3	12
22	.68	3.4	3.0	3.0	7.0	150	124	203	24	11	5.3	12
23	.68	3.4	3.0	3.0	7.0	200	97	215	18	11	7.4	11
24	.76	4.0	3.0	2.2	8.0	150	114	209	14	18	6.7	12
25	.76	4.0	3.0	2.4	8.5	120	152	203	16	14	6.2	11
26	.76	3.6	3.0	2.6	9.0	100	150	203	18	11	5.6	12
27	.84	3.8	2.8	3.2	10	110	182	203	19	10	5.3	11
28	.84	3.6	2.8	3.0	11	120	150	185	19	9.0	7.0	11
29	.84	3.6	2.8	2.2	---	130	124	152	21	8.2	5.0	9.8
30	2.8	4.0	2.6	2.6	---	140	99	160	28	8.2	5.0	9.4
31	2.3	---	2.4	3.2	---	155	---	218	---	7.8	4.5	---
TOTAL	25.58	86.64	98.0	86.6	215.0	2418	3982	5377	3478	475.2	191.1	250.7
MEAN	.83	2.89	3.16	2.79	7.68	78.0	133	173	116	15.3	6.16	8.36
MAX	2.8	4.0	4.0	4.4	14	200	275	388	251	25	12	12
MIN	.10	.92	2.4	1.0	3.0	14	90	76	14	7.8	3.6	4.2
AC-FT	51	172	194	172	426	4800	7900	10670	6900	943	379	497

CAL YR 1977 TOTAL 1576.91 MEAN 4.32 MAX 84 MIN .00 AC-FT 3130
WTR YR 1978 TOTAL 16683.82 MEAN 45.7 MAX 388 MIN .10 AC-FT 33090

NOTE.--NO GAGE-HEIGHT RECORD FEB. 17 TO MAR. 28.

09370800 MANCOS RIVER NEAR CORTEZ, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1976 to current year.

INSTRUMENTATION.--Water-quality monitor since July 1976.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 4,600 micromhos June 4, 1977; minimum, 319 micromhos May 17, 1978.
WATER TEMPERATURE: Maximum, 34.0°C July 31, 1978; minimum, freezing point many days during winter months each year.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 4,000 micromhos Oct. 5; minimum, 319 micromhos May 17.
WATER TEMPERATURES: Maximum, 34.0°C July 31; minimum, freezing point many days during November to February.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
NOV									
08...	1020	3.9	1820	6.9	4.0	10.2	850	730	200
DEC									
12...	1045	3.2	3350	7.5	.0	11.8	1700	1500	330
JAN									
11...	1330	7.5	2440	7.9	1.0	11.2	1300	1100	260
FEB									
15...	0950	3.7	3020	7.9	.0	11.6	1700	1400	320
MAR									
28...	1140	112	950	8.7	9.0	9.0	380	280	93
APR									
25...	0950	180	420	7.3	9.0	9.5	180	--	44
MAY									
31...	1130	242	410	7.1	9.0	8.8	190	110	47
JUN									
28...	0950	18	1720	8.0	18.0	7.8	910	750	200
AUG									
02...	1400	7.1	1860	7.5	26.0	6.4	910	770	200
30...	1110	5.1	2000	8.2	15.0	8.0	1000	930	200
SEP									
27...	1110	11	2010	8.1	13.0	8.1	1100	920	240

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)
NOV									
08...	86	150	2.2	5.9	150	0	120	980	20
DEC									
12...	220	240	2.5	5.4	270	0	220	1900	29
JAN									
11...	160	160	1.9	3.8	250	0	210	1400	22
FEB									
15...	210	250	2.7	5.1	310	0	250	1800	33
MAR									
28...	36	49	1.1	4.6	120	1	100	360	8.6
APR									
25...	17	18	.6	1.9	--	0	--	140	3.2
MAY									
31...	17	17	.5	1.5	92	0	75	--	9.0
JUN									
28...	100	110	1.6	4.4	200	0	164	880	15
AUG									
02...	100	99	1.4	4.6	170	0	140	930	15
30...	130	120	1.6	4.1	130	0	110	1100	24
SEP									
27...	120	130	1.7	6.0	210	0	170	1100	21

09370800 MANCOS RIVER NEAR CORTEZ, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
NOV 08...	.5	4.7	1520	2.07	16.0	.74	.01	30	20
DEC 12...	.2	10	2870	3.90	24.8	.93	.02	30	100
JAN 11...	.2	9.1	2140	2.91	43.5	.79	.01	40	80
FEB 15...	.2	8.9	2790	3.79	27.9	1.1	.01	20	110
MAR 28...	.2	6.8	622	.85	188	.73	.01	70	20
APR 25...	.1	7.9	--	.42	152	.11	.00	90	10
MAY 31...	.2	6.8	--	--	--	.12	.00	50	0
JUN 28...	.2	10	1420	1.93	70.9	.48	.01	30	20
AUG 02...	.2	8.4	1440	1.96	27.7	.01	.00	<10	8
30...	.2	7.3	1650	2.24	22.7	.02	.01	350	10
SEP 27...	.2	10	1730	2.35	52.8	.28	.01	20	0

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3790	2130	3120	2580	2500	2320	1020	512	445	1750	1820	2280
2	3940	3690	2960	2780	2520	2480	651	532	445	1750	1810	2360
3	3890	3320	2960	3070	2600	2600	610	562	445	1690	1820	2360
4	3880	2870	2980	3050	2760	2600	574	597	445	1600	1880	2330
5	3930	2930	3000	2630	2740	2640	616	607	486	1550	1930	2310
6	3630	2820	3080	2490	2360	2720	614	635	543	1670	1960	2330
7	3170	2190	3060	2570	2280	2870	640	683	534	1740	1900	2350
8	2430	2000	3060	2690	2430	2960	670	740	531	1780	1880	2350
9	2520	2260	3070	2900	2640	3010	643	785	526	1860	1900	2350
10	2910	2520	3040	2910	2830	3000	644	798	523	1880	1990	2270
11	3230	2880	3040	2630	2640	2990	636	781	520	1880	2270	2230
12	3370	3130	3040	2450	2700	3060	630	760	521	1830	2020	2180
13	3690	3080	3060	2480	2970	2990	609	732	568	1730	1960	2150
14	3750	2940	3060	2590	3070	3010	589	584	635	1720	1840	2160
15	3700	3030	3080	2670	3070	2920	574	439	659	1720	1800	2280
16	3690	3140	3100	2510	3100	2970	541	378	683	1780	1790	2290
17	3750	3130	3110	2400	3070	3030	466	344	799	1820	1670	2310
18	3730	3130	3120	2450	3120	2820	417	351	884	1690	1230	2340
19	3750	3090	3120	2440	3090	2080	439	378	941	1610	1200	2370
20	3710	3040	3080	2610	2940	2090	470	404	1140	1570	1420	2410
21	3690	3070	3140	2600	2710	1150	491	477	1310	1610	1530	2440
22	3640	3080	3060	2640	2350	1000	462	457	1430	1660	1620	2480
23	3550	3130	3060	2700	2370	650	427	406	1650	1680	1670	2510
24	3440	3130	3040	2710	2320	1000	479	388	1790	1660	1740	2550
25	3390	3270	3040	2750	2360	1250	459	389	1880	1770	1600	2580
26	3320	3090	3040	2840	2440	1350	440	391	1780	1750	1900	2310
27	3360	3050	3080	2800	2490	1300	433	395	1740	1810	1980	2200
28	3380	3070	2980	2710	2570	1250	429	423	1750	1820	2050	2310
29	3390	3120	2770	2630	---	1090	463	453	1700	1820	2000	2380
30	3340	3080	2670	2640	---	1100	491	459	1870	1830	2090	2440
31	2920	---	2480	2590	---	1100	---	443	---	1840	2260	---

09370800 MANCOS RIVER NEAR CORTEZ, CO--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	19.5	5.5	6.5	.5	---	.0	1.5	.5	1.5	-0.5	5.0	3.5
2	21.5	5.0	7.0	.0	---	.0	1.0	.5	1.5	.0	5.5	4.0
3	24.5	10.0	8.5	.5	---	.0	1.0	.5	1.5	-0.5	5.0	4.0
4	25.5	11.0	10.5	2.5	---	.0	1.0	.5	2.5	-0.5	5.0	4.5
5	24.5	10.5	10.0	3.0	---	.0	1.5	.5	2.5	-0.5	5.0	5.0
6	18.5	13.5	6.5	5.0	---	.0	1.0	.5	2.0	.0	5.5	4.5
7	20.5	4.5	7.5	4.0	---	.0	1.5	1.0	4.5	.0	6.0	5.0
8	16.0	6.0	6.0	2.0	---	.0	2.0	1.0	2.0	-0.5	6.0	5.5
9	16.0	5.0	4.0	2.0	---	.0	1.5	1.0	.5	-0.5	6.0	5.5
10	14.5	4.0	4.0	2.0	---	.0	1.0	.5	.5	-0.5	6.0	5.5
11	15.0	4.0	4.5	1.5	---	.0	1.5	.5	1.5	-0.5	6.0	5.5
12	15.5	5.0	7.0	1.0	---	.0	3.0	1.5	1.0	-0.5	6.0	5.5
13	16.5	5.5	6.5	1.5	---	.0	2.5	1.5	.5	-0.5	5.5	5.0
14	16.0	5.0	6.0	1.0	---	.0	2.0	1.5	1.5	-0.5	5.5	5.0
15	16.0	5.5	6.0	1.0	---	.0	1.5	1.0	.0	-0.5	5.5	4.5
16	16.0	6.0	6.0	1.0	---	.0	2.0	1.0	---	---	6.5	4.5
17	12.5	5.5	6.0	1.0	---	.0	1.5	1.0	---	---	6.5	5.0
18	---	---	6.0	2.0	---	.0	2.0	1.0	---	---	7.0	6.0
19	15.0	6.0	4.5	3.0	---	.0	1.5	1.0	---	---	6.5	6.0
20	14.0	6.0	4.5	1.5	---	.0	2.0	1.0	---	---	7.5	5.5
21	14.0	7.5	3.0	.0	---	.0	2.5	1.0	2.0	1.5	7.5	5.5
22	15.5	5.0	3.0	.0	---	.0	1.5	1.0	5.0	1.0	7.0	6.5
23	14.5	4.5	3.0	.0	---	.0	1.5	1.0	6.0	1.0	6.5	6.0
24	13.0	4.0	3.0	.0	---	.0	1.5	1.0	6.5	1.0	6.5	6.0
25	13.0	4.0	4.5	-0.5	---	.0	1.5	1.0	7.5	1.0	7.0	5.5
26	13.0	3.5	4.5	.0	---	.0	1.5	1.0	7.0	2.0	7.5	6.0
27	12.5	3.5	3.0	.5	.0	.0	1.5	1.0	6.0	3.5	8.0	6.5
28	13.0	3.5	3.0	-0.5	.5	.0	1.5	---	6.5	3.0	7.5	7.5
29	11.0	5.0	.5	-0.5	.5	.0	1.0	---	---	---	9.0	7.0
30	13.0	5.5	---	---	.5	.0	1.0	-0.5	---	---	9.5	8.0
31	7.0	2.5	---	---	1.5	.0	.0	-0.5	---	---	10.5	8.5

09370800 MANCOS RIVER NEAR CORTEZ, CO--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	11.0	6.5	8.0	6.5	8.0	8.0	24.5	13.0	32.5	21.0	25.0	14.0
2	8.5	6.0	7.0	5.5	8.0	8.0	24.5	13.0	27.5	18.5	25.5	11.5
3	9.0	7.0	11.0	6.0	8.0	8.0	23.0	12.5	25.5	14.5	26.0	13.5
4	10.5	7.5	9.5	6.5	8.0	8.0	23.0	11.5	27.0	15.0	28.5	15.5
5	10.0	8.0	6.5	4.0	13.0	8.0	23.5	12.0	28.0	15.0	28.0	15.5
6	11.5	8.5	6.5	2.5	13.0	9.5	24.0	11.0	28.0	15.0	28.5	15.5
7	12.0	9.5	6.5	4.5	13.0	9.5	25.0	11.5	28.5	18.0	25.5	16.0
8	11.5	9.0	7.5	4.0	13.0	9.5	22.5	14.5	28.5	16.5	25.5	13.0
9	9.5	8.0	10.0	5.0	13.5	9.5	26.5	16.0	30.0	17.0	24.5	12.5
10	10.5	7.5	11.0	7.5	13.0	9.5	25.5	17.5	26.5	16.5	21.5	15.5
11	12.0	8.5	13.0	7.5	16.5	---	25.5	17.0	28.0	17.0	23.5	13.0
12	12.5	10.0	14.0	9.0	---	---	27.0	16.5	25.5	18.5	22.5	11.5
13	12.5	9.5	15.5	7.5	20.0	---	26.5	14.0	26.0	17.0	19.0	12.0
14	11.0	9.0	17.0	9.0	20.0	12.0	28.5	---	25.5	17.0	15.5	8.0
15	12.5	9.5	16.0	8.5	20.0	13.0	27.5	13.5	25.5	14.0	21.5	10.0
16	12.5	9.5	15.0	6.5	19.5	11.5	26.0	17.0	26.0	13.5	16.5	9.5
17	11.5	7.5	11.5	5.0	20.0	11.5	27.5	16.5	25.0	15.0	19.5	14.0
18	10.0	4.0	12.5	3.5	20.5	11.5	26.5	16.5	18.5	14.0	---	---
19	9.0	5.5	12.5	5.0	22.0	13.5	28.5	17.5	22.0	12.0	---	---
20	9.5	6.5	11.0	6.5	23.5	12.0	29.5	18.5	28.0	15.5	---	---
21	9.5	7.0	15.0	4.5	25.0	12.5	29.5	18.5	26.0	---	---	---
22	8.5	6.0	15.0	6.5	25.5	13.5	29.0	---	19.0	17.5	---	---
23	10.0	6.0	14.0	7.5	27.0	14.0	30.0	18.5	25.5	15.5	---	---
24	10.5	7.5	14.0	6.5	26.0	15.0	28.5	19.0	19.5	16.0	---	---
25	11.0	8.0	14.0	7.5	26.5	15.5	29.5	19.0	24.0	16.0	---	---
26	13.5	7.0	14.5	6.5	23.5	13.0	27.5	18.5	26.5	14.0	19.5	13.5
27	13.0	7.0	13.5	8.5	25.0	15.5	32.0	19.0	25.0	11.5	20.0	12.5
28	11.0	5.5	15.5	6.5	21.0	17.5	33.0	20.5	25.0	10.5	20.0	11.5
29	11.5	6.5	16.5	7.0	20.0	16.0	30.5	20.0	25.5	13.0	19.0	11.0
30	11.5	7.5	17.0	8.0	23.5	14.0	31.5	21.0	25.0	14.0	19.0	9.5
31	---	---	14.5	8.0	---	---	34.0	21.0	25.5	12.5	---	---

09371000 MANCOS RIVER NEAR TOWAOC, CO

LOCATION.--Lat 37°01'39", long 108°44'27", Ute Indian Reservation, Montezuma County, Hydrologic Unit 14080107, on left bank 700 ft (210 m) upstream from bridge on U.S. Highway 666, 2.0 mi (3.2 km) north of Colorado-New Mexico State line, 6.0 mi (9.7 km) upstream from Aztec Creek, and 12 mi (19 km) south of Towaoc.

DRAINAGE AREA.--550 mi² (1,420 km²), approximately.

PERIOD OF RECORD.--October 1920 to September 1943, February 1951 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1733: 1924 (monthly figures only).

GAGE.--Water-stage recorder. Datum of gage is 5,055.98 ft (1,541.063 m), National Geodetic Vertical Datum of 1929. See WSP 1713 or 1733 for history of changes prior to Mar. 11, 1954.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of about 10,000 acres (40.5 km²) above station. One diversion above station for irrigation of about 100 acres (405,000 m²) below. Flow regulated by Jackson Gulch Reservoir, capacity, 10,000 acre-ft (12.3 hm³) since March 1949. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--50 years, 49.1 ft³/s (1.391 m³/s), 35,570 acreft/yr (43.9 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,300 ft³/s (150 m³/s) Oct. 14 1941, gage height, 7.30 ft (2.225 m), present site and datum, from rating curve extended above 200 ft³/s (5.7 m³/s), on basis of slope-area measurement of peak flow; maximum gage height, 8.50 ft (2.591 m) Sept. 6, 1970; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 575 ft³/s (16.3 m³/s) May 17, gage height, 4.03 ft (1.228 m), no peak above base of 700 ft³/s (20 m³/s); no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.45	2.5	8.7	14	172	92	225	17	.19	.00
2	.00	.26	.31	1.4	6.7	35	263	94	240	12	.02	.00
3	.00	.10	.25	1.1	4.7	94	141	102	230	13	.00	.00
4	.00	.05	.13	2.6	5.2	64	100	86	218	16	.00	.00
5	.00	.00	1.2	3.0	5.0	52	89	77	212	15	.00	.00
6	.89	7.8	1.3	3.0	10	52	93	84	208	6.7	.00	.00
7	.60	6.4	.55	3.1	12	45	84	127	177	5.2	.00	.00
8	.01	7.0	.60	1.8	13	43	117	126	173	4.3	.00	.00
9	.00	1.9	.34	1.4	10	49	108	106	173	1.9	.00	.00
10	.00	.80	.40	4.0	5.0	52	164	116	183	1.6	.00	.00
11	.00	.37	.34	3.8	16	42	89	112	183	1.3	.00	.00
12	.00	.22	.40	3.8	12	54	94	110	159	2.5	.00	.00
13	.00	.16	.85	3.2	7.7	47	129	124	139	4.0	.00	.00
14	.00	.65	.70	2.6	7.0	40	122	145	118	6.4	.00	.00
15	.00	.55	.60	4.6	7.2	30	108	201	110	8.4	.00	.00
16	.00	.40	2.6	3.4	8.0	22	111	289	100	6.4	.00	.00
17	.00	.60	1.8	4.6	6.4	20	123	411	83	5.2	.00	.00
18	.00	.34	1.6	4.4	3.4	38	108	342	71	9.3	.00	.00
19	.00	.06	1.8	3.6	5.4	72	98	242	61	19	.00	.00
20	.00	.02	1.7	3.8	7.0	69	105	220	43	13	.00	.00
21	.00	.24	.45	4.0	9.0	167	116	232	26	8.4	.00	.00
22	.00	.75	.60	3.2	7.2	142	122	232	18	5.7	.00	.00
23	.00	.60	.55	3.2	7.5	201	105	248	10	3.9	.00	.00
24	.00	.60	.85	2.5	8.4	144	104	245	7.0	5.1	.00	2.0
25	.00	.25	1.7	2.8	9.0	126	130	235	6.4	8.7	.00	24
26	.00	.54	1.2	3.0	9.8	108	145	240	6.4	8.0	.00	43
27	.00	.80	2.2	3.4	11	117	159	235	8.4	4.7	.00	13
28	.00	1.2	2.4	3.2	12	129	147	212	10	5.9	.00	8.7
29	1.0	1.2	3.1	2.6	---	112	123	177	10	2.6	.00	7.7
30	.95	.65	3.1	2.9	---	127	102	167	14	1.5	.00	7.2
31	.01	---	3.6	3.6	---	132	---	193	---	.85	.00	---
TOTAL	3.46	34.51	37.67	96.1	234.3	2439	3671	5622	3222.2	223.55	.21	105.60
MEAN	.11	1.15	1.22	3.10	8.37	78.7	122	181	107	7.21	.007	3.52
MAX	1.0	7.8	3.6	4.6	16	201	263	411	240	19	.19	43
MIN	.00	.00	.13	1.1	3.4	14	84	77	6.4	.85	.00	.00
AC-FT	6.9	68	75	191	465	4840	7280	11150	6390	443	.4	209

CAL YR 1977 TOTAL 1385.96 MEAN 3.80 MAX 261 MIN .00 AC-FT 2750
WTR YR 1978 TOTAL 15689.60 MEAN 43.0 MAX 411 MIN .00 AC-FT 31120

09371400 HARTMAN DRAW AT CORTEZ, CO

LOCATION.--Lat 37°19'26", long 108°36'52", in NW¼NE¼ sec.4, T.35 N., R.16 W., Montezuma County, Hydrologic Unit 14080202, on left bank 600 ft (180 m) upstream from mouth, 0.30 mi (0.5 km) upstream from McElmo Fall, and 1.2 mi (1.9 km) southwest of Cortez.

DRAINAGE AREA.--34.0 mi^2 (88.1 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April to September 1978.

GAGE.--Water-stage recorder. Altitude of gage is 5,900 ft (1,798 m), from topographic map.

REMARKS.--Records good.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period April to September, 32 ft^3/s (0.91 m^3/s) May 6, gage height, 2.84 ft (0.866 m); minimum daily, 1.3 ft^3/s (0.037 m^3/s) Sept. 12, 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							7.0	11	7.5	9.9	7.2	3.9
2							7.0	21	7.4	10	7.5	4.3
3							7.0	21	6.3	11	7.2	4.3
4							7.4	16	5.7	9.7	7.2	4.2
5							7.0	18	6.8	9.2	6.9	3.5
6							7.0	25	9.4	8.5	7.0	3.1
7							6.4	25	9.6	8.5	7.0	3.2
8							6.0	21	9.7	8.7	7.4	3.0
9							10	15	8.5	10	8.5	3.0
10							10	12	8.4	9.6	8.9	2.6
11							8.0	11	8.9	11	9.0	2.1
12							7.4	10	9.7	11	6.8	1.3
13							6.4	9.9	10	10	6.3	1.3
14							6.0	10	12	9.9	6.4	1.4
15							5.6	10	12	9.4	6.0	1.6
16							5.2	10	12	9.7	5.7	1.6
17							5.1	12	12	14	5.1	2.0
18							4.6	14	12	15	4.6	2.0
19							4.8	13	14	12	4.7	2.0
20							4.8	12	14	11	4.8	1.8
21							4.7	14	13	9.9	4.8	4.2
22							4.6	14	13	9.7	5.2	5.9
23							4.5	12	12	11	6.3	5.6
24							4.1	12	12	9.7	5.4	8.4
25							4.2	13	11	8.9	5.4	7.0
26							5.4	13	11	9.9	5.2	5.5
27							5.2	11	11	8.9	5.0	3.7
28							5.2	9.0	11	7.5	4.6	3.5
29							5.5	8.4	11	7.0	4.2	3.1
30							7.2	7.2	12	7.0	4.2	3.2
31							---	6.8	---	7.0	4.0	---
TOTAL							183.3	417.3	312.9	304.6	188.5	102.3
MEAN							6.11	13.5	10.4	9.83	6.08	3.41
MAX							10	25	14	15	9.0	8.4
MIN							4.1	6.8	5.7	7.0	4.0	1.3
AC-FT							364	828	621	604	374	203

09371400 HARTMAN DRAW AT CORTEZ, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1978 to September 1978.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1978 to September 1978.
WATER TEMPERATURES: April 1978 to September 1978.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 3,150 micromhos Apr. 30; minimum, 1,500 micromhos Aug. 2.
WATER TEMPERATURES: Maximum, 25.0°C July 30, 31; minimum, not determined.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							2960	2970	1820	1860	2020	1890
2							2960	2520	1800	1840	1830	1870
3							2960	2350	1830	1760	1590	1900
4							2900	2290	1860	1860	1710	1980
5							2960	2200	1830	1880	1720	2160
6							2960	2190	1810	1910	1750	2330
7							3000	2270	1880	1910	1790	2400
8							3050	2410	1890	1900	1820	2450
9							2440	2510	1880	1840	1830	2520
10							2440	2570	1830	1860	1850	2570
11							2500	2540	1750	1800	1860	2630
12							2550	2440	1700	1840	1910	2700
13							2600	2350	1710	2000	1970	2770
14							2600	2310	1690	1980	2010	2770
15							2650	2290	1680	1960	2080	2760
16							2650	2270	1670	1980	2120	2760
17							2620	2200	1670	1930	2040	2660
18							2630	2090	1680	1920	1710	2700
19							2810	2000	1650	1770	1950	2700
20							2840	2040	1640	1780	1600	2720
21							2840	1990	1650	1760	1680	2740
22							2850	1920	1660	1760	1750	2760
23							2850	1640	1660	1790	1850	2780
24							2890	1560	1680	1800	1880	2730
25							2920	1570	1720	1840	1900	2950
26							2910	1570	1760	1870	1940	2960
27							2870	1610	1770	1910	1990	2930
28							2770	1630	1760	1940	2070	2720
29							2780	1670	1760	1970	2150	2620
30							3020	1750	1740	1990	2160	2590
31							---	1810	---	2010	2080	---

09371400 HARTMAN DRAW AT CORTEZ, CO--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	13.0	9.5	22.0	13.0	---	---	23.5	17.0	19.5	13.0
2	---	---	11.5	8.5	21.5	13.5	---	---	22.5	17.0	19.5	12.0
3	---	---	16.0	8.5	22.0	13.0	---	---	21.5	15.0	20.0	13.0
4	---	---	12.0	8.5	22.0	14.0	---	---	23.0	16.0	21.0	14.0
5	---	---	8.0	5.5	21.0	14.0	---	---	22.5	15.5	22.0	14.0
6	---	---	11.5	3.5	22.0	15.0	---	---	23.0	15.5	21.5	14.5
7	---	---	9.0	4.0	22.0	14.5	---	---	24.0	17.0	21.0	15.5
8	---	---	13.0	5.0	21.5	15.0	---	---	23.0	16.5	19.5	12.5
9	---	---	17.5	6.5	22.5	15.5	---	---	23.5	17.0	20.5	12.0
10	---	---	18.5	9.0	22.0	16.0	---	---	24.0	17.0	20.0	14.5
11	---	---	17.5	9.0	22.5	15.0	---	---	24.0	17.5	19.5	12.5
12	---	---	18.0	8.5	23.0	15.0	---	---	22.5	18.5	18.5	10.0
13	---	---	19.5	7.5	22.5	16.0	24.0	16.5	22.5	17.5	18.5	11.0
14	---	---	21.0	10.0	22.5	15.5	24.5	16.5	21.5	17.0	15.0	9.5
15	---	---	21.0	11.5	22.5	16.5	22.5	18.0	22.0	14.5	19.0	10.5
16	---	---	20.0	11.0	22.0	14.5	22.5	17.5	22.5	14.5	18.0	10.5
17	17.0	9.0	15.5	9.0	22.0	14.0	22.5	16.5	20.5	15.5	17.5	13.0
18	17.5	5.5	18.5	7.5	21.5	14.5	24.0	16.5	21.0	14.0	17.0	12.0
19	17.5	6.5	19.0	9.0	22.5	15.5	24.5	17.5	20.0	13.5	16.5	10.0
20	18.0	7.5	16.0	12.0	22.5	14.5	24.5	18.5	22.0	15.0	15.0	6.5
21	19.0	8.0	19.5	10.5	22.5	15.0	24.5	17.5	22.0	15.0	15.5	5.5
22	18.0	7.0	19.0	12.0	22.0	16.0	23.5	15.5	21.5	17.0	19.0	10.0
23	19.5	7.5	16.5	11.5	22.5	15.5	22.5	16.5	21.0	15.0	18.5	10.5
24	20.0	9.0	18.0	9.0	22.0	16.5	23.0	17.0	22.0	15.0	15.5	13.0
25	17.5	11.5	16.5	11.0	22.5	16.5	24.0	17.0	21.5	15.5	17.5	12.0
26	20.0	10.0	18.5	9.0	21.5	15.0	22.5	17.0	21.0	14.0	20.0	12.0
27	20.5	11.5	18.0	13.0	21.5	16.0	24.0	16.5	20.0	12.5	17.5	12.0
28	17.5	9.5	19.5	10.5	19.0	17.5	24.5	17.5	20.0	11.5	18.0	9.5
29	19.0	9.5	20.5	11.0	---	---	23.5	17.0	20.5	12.5	17.5	9.5
30	17.5	10.5	20.5	12.0	---	---	25.0	17.5	17.5	13.0	17.0	8.5
31	---	---	21.5	12.5	---	---	25.0	18.0	19.0	12.5	---	---

09371420 McELMO CREEK ABOVE ALKALI CANYON, NEAR CORTEZ, CO

LOCATION.--Lat 37°19'38", long 108°38'55", in SE¼SE¼ sec.31, T.36 N., R.16 W., Montezuma County, Hydrologic Unit 14080202, on left bank 0.9 mi (1.4 km) upstream from Alkali Canyon and 4.0 mi (6.4 km) southwest of Cortez.

DRAINAGE AREA.--147 mi² (381 km²).

PERIOD OF RECORD.--October 1972 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,750 ft (1,753 m), from topographic map.

REMARKS.--Records good. Diversions from tributaries above station for irrigation. Low flows are mainly return flow from irrigated areas. Water is imported above station from Dolores River basin for irrigation of about 33,000 acres (134 km²) above and below station in Montezuma Irrigation District and for municipal use by city of Cortez. A small amount of water is diverted at times to Mancos River basin. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--6 years, 22.6 ft³/s (0.640 m³/s), 16,370 acre-ft/yr (20.2 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 816 ft³/s (23.1 m³/s) July 31, 1976, gage height, 5.92 ft (1.804 m), from rating curve extended above 190 ft³/s (5.4 m³/s), on basis of step-backwater method; minimum daily, 1.5 ft³/s (0.042 m³/s) Sept. 21, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 190 ft³/s (5.38 m³/s) Mar. 3, gage height, 3.39 ft (1.033 m), from rating curve extended above 190 ft³/s (5.4 m³/s), on basis of step-backwater method; minimum daily, 2.2 ft³/s (0.062 m³/s) Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	7.5	7.3	6.0	7.5	74	37	39	14	23	12	5.2
2	2.4	6.2	9.6	6.0	6.8	108	46	70	16	20	12	6.0
3	2.4	6.2	10	6.0	6.8	144	38	61	15	20	12	6.2
4	2.7	6.8	6.5	6.0	7.0	74	27	32	17	20	12	6.8
5	2.9	6.5	6.8	6.0	7.3	56	22	31	18	17	11	5.2
6	6.4	20	6.0	6.2	13	49	20	49	27	14	10	4.2
7	24	36	6.8	6.5	19	39	16	66	24	13	11	4.4
8	12	7.5	7.3	6.5	24	31	14	64	20	12	12	4.2
9	5.5	5.5	7.0	6.5	14	26	29	40	19	12	13	4.2
10	5.2	5.5	7.0	6.8	12	23	52	31	18	13	14	4.2
11	4.4	5.5	7.0	7.3	20	20	35	20	16	14	16	4.4
12	4.0	5.5	7.0	7.8	16	35	17	15	18	15	13	3.0
13	4.4	5.7	7.0	7.0	11	38	14	13	20	12	10	2.4
14	4.6	5.7	7.0	7.8	10	30	13	13	22	12	9.6	2.4
15	4.6	5.7	7.0	5.7	9.3	16	12	13	24	12	8.2	3.0
16	4.6	5.7	7.0	13	9.6	13	11	14	25	12	7.5	3.2
17	4.6	5.5	7.0	10	7.8	12	10	18	24	20	7.0	4.8
18	4.6	6.8	7.0	7.8	8.9	15	9.6	25	26	28	6.0	6.5
19	4.4	6.5	6.0	6.5	13	22	9.3	24	32	21	19	5.7
20	4.4	7.3	5.5	6.8	12	27	9.3	20	31	17	8.5	5.0
21	4.4	6.5	5.5	6.0	8.9	40	9.3	27	34	14	7.3	6.8
22	4.6	6.2	5.0	5.5	8.5	74	9.3	29	30	12	7.5	9.6
23	4.6	6.2	5.7	6.5	10	95	9.6	23	31	12	10	9.6
24	4.2	6.0	6.5	6.8	11	48	9.6	19	30	14	8.9	23
25	5.0	5.7	6.0	6.8	14	39	10	24	26	14	8.5	24
26	4.6	5.5	5.7	7.3	17	31	12	25	26	14	7.8	12
27	4.6	5.7	5.5	7.5	16	27	13	24	25	12	7.5	10
28	4.6	5.5	5.5	9.3	16	25	19	20	24	12	7.0	10
29	4.8	5.7	6.0	8.9	---	31	14	19	24	11	6.8	9.6
30	14	6.5	6.0	10	---	27	16	16	27	11	6.2	9.3
31	8.5	---	6.0	7.5	---	21	---	14	---	11	5.5	---
TOTAL	174.2	227.1	205.2	224.3	336.4	1310	563.0	898	703	464	306.8	214.9
MEAN	5.62	7.57	6.62	7.24	12.0	42.3	18.8	29.0	23.4	15.0	9.90	7.16
MAX	24	36	10	13	24	144	52	70	34	28	19	24
MIN	2.2	5.5	5.0	5.5	6.8	12	9.3	13	14	11	5.5	2.4
AC-FT	346	450	407	445	667	2600	1120	1780	1390	920	609	426

CAL YR 1977 TOTAL 3101.9 MEAN 8.50 MAX 175 MIN 1.5 AC-FT 6150
WTR YR 1978 TOTAL 5626.9 MEAN 15.4 MAX 144 MIN 2.2 AC-FT 11160

09371495 MUD CREEK NEAR CORTEZ, CO

LOCATION.--Lat 37°19'10", long 108°40'03", in SE¼NE¼ sec.1, T.35 N., R.17 W., Montezuma County, Hydrologic Unit 14080202, on right bank 0.4 mi (0.6 km) upstream from mouth, and 4 mi (6.4 km) southwest of Cortez.

DRAINAGE AREA.--33.6 mi² (87.0 km²).

PERIOD OF RECORD.--April to September 1978.

GAGE.--Water-stage recorder. Altitude of gage is 5,740 ft (1,750 m), from topographic map.

REMARKS.--Records fair. Several small diversions above station for irrigation of hay meadows above and below gage. Most of flow is return flow from irrigated areas. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period April to September, 42 ft³/s (1.19 m³/s) June 19, gage height, 3.50 ft (1.067 m); maximum gage height, 3.80 ft (1.158 m) July 24, backwater from moss; minimum daily, 0.03 ft³/s (0.001 m³/s) Aug. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							1.4	4.3	5.7	5.8	6.8	.96
2							1.4	5.3	6.3	3.1	4.4	.72
3							1.4	3.6	6.4	3.3	5.2	.64
4							1.4	2.6	10	4.5	5.1	.72
5							1.5	4.5	19	6.9	5.1	.52
6							1.5	5.6	23	9.2	3.2	.32
7							1.4	4.7	19	10	.03	.30
8							1.2	4.2	22	8.5	.08	.28
9							2.6	2.5	19	9.0	1.1	.32
10							2.0	1.9	17	9.2	4.8	.38
11							1.4	1.6	20	10	5.0	.88
12							1.3	1.9	19	9.2	3.9	1.4
13							1.4	2.5	12	3.1	.14	1.3
14							1.6	2.6	3.6	3.4	.14	1.4
15							1.6	2.2	12	3.2	.18	1.4
16							1.4	3.1	16	2.5	.18	.64
17							1.5	2.7	18	4.2	2.1	.52
18							1.5	3.1	16	7.6	3.2	.96
19							1.5	3.6	25	6.9	2.3	1.4
20							1.6	3.5	32	8.1	.44	2.8
21							1.8	5.1	20	6.0	1.9	4.2
22							1.7	4.4	15	8.3	2.3	2.2
23							1.9	6.8	17	11	3.4	1.4
24							2.0	6.1	15	9.6	3.5	1.4
25							2.0	6.9	13	5.4	3.3	1.4
26							2.0	9.8	12	2.1	4.3	1.4
27							2.0	9.8	6.9	1.9	5.0	1.5
28							2.1	10	.88	4.0	4.0	1.5
29							2.3	6.6	2.2	5.2	3.6	1.6
30							3.0	6.3	10	6.0	2.7	1.4
31							---	5.7	---	5.7	1.7	---
TOTAL							51.4	143.5	432.98	192.9	89.09	35.86
MEAN							1.71	4.63	14.4	6.22	2.87	1.20
MAX							3.0	10	32	11	6.8	4.2
MIN							1.2	1.6	.88	1.9	.03	.28
AC-FT							102	285	859	383	177	71

09371700 McELMO CREEK BELOW CORTEZ, CO

LOCATION.--Lat 37°20'26", long 108°48'19", in NW¼NW¼ sec.35, T.36 N., R.18 W., Montezuma County, Hydrologic Unit 14080202, on left bank 100 ft (30 m) downstream from bridge on State Highway 32, 150 ft (46 m) downstream from Sand Canyon, and 11.7 mi (18.8 km) west of Cortez.

DRAINAGE AREA.--283 mi² (733 km²).

PERIOD OF RECORD.--October 1972 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,430 ft (1,655 m), from topographic map.

REMARKS.--Records good except those for winter period, which are poor. Diversions above station by Black Dike ditch for irrigation of 310 acres (1.25 km²) above station and Rock Creek ditch for irrigation of 650 acres (2.63 km²) below station. Low flows are mainly return flows from irrigated areas. Water is imported above station from Dolores River basin for irrigation of about 33,000 acres (134 km²) above and below station in Montezuma Irrigation District and for municipal use by city of Cortez. A small amount of water is diverted at times to Mancos River basin. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--6 years, 34.0 ft³/s (0.963 m³/s), 24,630 acre-ft/yr (30.4 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,130 ft³/s (60.3 m³/s) July 19, 1977, gage height, 8.96 ft (2.731 m), from floodmarks, from rating curve extended above 400 ft³/s (11 m³/s), on basis of step-backwater method; minimum daily, 0.04 ft³/s (0.001 m³/s) Sept. 9, 1974.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 316 ft³/s (8.95 m³/s) Mar. 1, gage height, 4.25 ft (1.295 m); minimum daily, 0.24 ft³/s (0.007 m³/s) Oct. 1-6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.24	4.0	12	13	13	104	37	29	11	26	7.8	1.4
2	.24	3.0	10	13	11	173	62	75	12	24	8.8	1.4
3	.24	4.0	13	14	11	230	49	62	12	22	8.5	1.3
4	.24	10	19	14	12	142	39	33	14	24	6.0	1.2
5	.24	28	13	13	10	102	35	35	22	26	5.0	1.3
6	.24	55	10	12	16	89	39	66	32	22	4.3	1.0
7	3.6	40	9.0	12	22	78	38	84	27	18	3.8	.80
8	7.3	20	8.0	12	25	62	24	81	21	17	3.5	.80
9	7.8	15	6.5	13	20	50	11	39	16	17	4.0	2.6
10	6.0	11	6.5	15	18	44	39	31	15	19	5.0	4.0
11	1.9	10	8.0	15	26	37	18	20	12	18	5.8	2.6
12	1.7	10	9.0	15	24	52	5.0	13	12	18	4.0	1.6
13	1.6	9.5	9.8	14	16	62	2.8	8.0	12	11	3.8	1.2
14	1.5	9.0	10	12	16	50	2.0	12	29	15	3.6	1.0
15	1.4	9.0	11	16	14	33	1.4	11	15	21	3.0	1.0
16	1.4	8.5	11	15	16	27	1.3	7.3	15	22	2.2	1.0
17	1.3	8.5	10	15	12	25	1.6	9.0	15	26	2.2	1.3
18	1.3	8.5	10	14	12	27	7.6	22	16	36	2.0	1.6
19	1.3	8.5	9.5	14	13	33	11	28	18	28	3.2	1.7
20	1.2	9.0	9.5	16	13	42	2.4	18	21	26	2.3	1.8
21	1.1	9.0	9.5	13	13	52	2.2	23	19	18	1.7	2.5
22	.90	9.0	20	12	13	82	2.0	27	17	19	1.9	2.8
23	1.0	9.0	15	14	15	139	1.9	30	18	20	4.6	2.8
24	.90	9.0	11	11	16	68	1.3	25	18	20	3.1	22
25	.73	9.0	9.5	13	19	50	1.3	20	16	17	2.8	48
26	.73	9.0	12	14	21	42	1.3	22	19	11	2.0	27
27	.73	8.5	14	14	21	33	1.7	16	19	7.6	1.7	17
28	.80	7.3	12	14	22	32	3.0	12	17	9.0	1.7	23
29	.80	10	12	15	---	34	2.8	12	18	7.8	1.5	30
30	1.1	13	14	11	---	33	4.8	12	27	9.0	1.4	30
31	1.9	---	18	14	---	28	---	11	---	9.0	1.3	---
TOTAL	51.43	373.3	351.8	422	460	2055	448.4	893.3	535	583.4	112.5	235.70
MEAN	1.66	12.4	11.3	13.6	16.4	66.3	14.9	28.8	17.8	18.8	3.63	7.86
MAX	7.8	55	20	16	26	230	62	84	32	36	8.8	48
MIN	.24	3.0	6.5	11	10	25	1.3	7.3	11	7.6	1.3	.80
AC-FT	102	740	698	837	912	4080	889	1770	1060	1160	223	468

CAL YR 1977 TOTAL 3797.69 MEAN 10.4 MAX 186 MIN .08 AC-FT 7530
WTR YR 1978 TOTAL 6521.83 MEAN 17.9 MAX 230 MIN .24 AC-FT 12940

09372000 McELMO CREEK NEAR COLORADO-UTAH STATE LINE

LOCATION.--Lat 37°19'27", long 109°00'54", in NE¼ sec.2, T.35 N., R.20 W., Montezuma County, Hydrologic Unit 14080202, on right bank 1.5 mi (2.4 km) upstream from Colorado-Utah State line, 2.0 mi (3.2 km) upstream from Yellowjacket Creek, and 2.0 mi (3.2 km) west of former town of McElmo.

DRAINAGE AREA.--346 mi² (896 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1951 to current year.

REVISED RECORDS.--WSP 1925: 1951-52(M), 1957(M). WRD Colo. 1972: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 5,890 ft (1,490 m), from topographic map.

REMARKS.--Records good. Diversions for irrigation of about 1,780 acres (7.20 km²) above station. One diversion above station for irrigation of about 60 acres (243,000 m²) below. Part of flow is return water from irrigated lands of Montezuma Irrigation District (water imported from Dolores River basin).

AVERAGE DISCHARGE.--27 years, 44.1 ft³/s (1.249 m³/s), 31,950 acre-ft/yr (39.4 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,040 ft³/s (86.1 m³/s) Aug. 7, 1967, gage height, 7.58 ft (2.310 m), from floodmark in gage well, from rating curve extended above 2,100 ft³/s (59 m³/s); maximum gage height, 8.13 ft (2.478 m) Sept. 6, 1970; minimum daily discharge, 0.08 ft³/s (0.002 m³/s) Sept. 9, 10, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 337 ft³/s (9.54 m³/s) Mar. 3, gage height, 4.55 ft (1.387 m), no peak above base of 620 ft³/s (18 m³/s); minimum daily, 0.17 ft³/s (0.005 m³/s) Oct. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.23	2.4	18	12	20	65	34	23	19	34	28	2.0
2	.17	2.8	14	12	17	148	67	92	16	37	24	1.8
3	.29	3.0	15	15	16	255	68	91	20	40	29	2.4
4	.75	6.5	18	17	17	165	47	50	28	43	24	2.2
5	.65	6.5	26	15	14	116	42	49	29	50	25	1.6
6	.35	72	14	15	22	114	47	81	42	39	20	2.4
7	5.1	64	12	12	34	92	46	117	42	33	9.0	1.9
8	22	24	12	10	46	70	42	121	39	32	6.5	1.9
9	4.0	16	9.0	12	36	53	35	81	32	27	9.7	2.2
10	2.8	15	9.0	15	30	44	73	60	20	34	8.5	4.5
11	3.6	14	10	15	78	35	53	37	19	24	9.7	2.8
12	2.6	13	11	15	43	67	35	28	19	21	7.5	2.8
13	2.2	13	10	15	26	76	25	22	22	10	6.5	2.8
14	2.2	12	8.5	15	23	59	23	19	23	11	7.0	1.9
15	2.6	12	10	16	23	35	22	23	30	27	4.0	2.4
16	2.4	11	15	16	27	26	22	15	39	29	3.6	2.6
17	2.2	11	9.0	18	21	25	22	10	37	35	3.4	3.8
18	3.0	11	16	18	17	27	22	12	39	52	2.4	6.5
19	2.6	11	11	19	17	33	21	24	39	50	2.4	8.0
20	1.7	12	8.0	20	20	46	20	23	40	36	3.6	7.5
21	1.3	12	7.5	17	23	64	18	20	39	33	5.5	12
22	2.0	12	20	16	21	67	18	32	39	29	5.5	15
23	2.8	12	17	19	21	151	12	27	33	36	8.5	17
24	3.0	12	15	15	24	76	9.0	33	30	32	10	22
25	1.2	12	12	15	26	60	6.0	28	28	23	9.7	54
26	.90	11	12	20	30	49	4.5	33	32	19	15	40
27	.75	11	15	20	32	37	5.5	27	27	9.7	12	40
28	.65	10	13	17	33	33	3.6	25	24	13	11	36
29	.70	12	14	19	---	34	11	23	19	14	5.5	34
30	.85	16	16	16	---	36	8.5	23	34	21	5.0	36
31	1.6	---	20	24	---	34	---	20	---	32	4.5	---
TOTAL	77.19	452.2	417.0	500	757	2192	862.1	1269	899	925.7	326.0	370.0
MEAN	2.49	15.1	13.5	16.1	27.0	70.7	28.7	40.9	30.0	29.9	10.5	12.3
MAX	22	72	26	24	78	255	73	121	42	52	29	54
MIN	.17	2.4	7.5	10	14	25	3.6	10	16	9.7	2.4	1.6
AC-FT	153	897	827	992	1500	4350	1710	2520	1780	1840	647	734

CAL YR 1977 TOTAL 4013.88 MEAN 11.0 MAX 106 MIN .08 AC-FT 7960
WTR YR 1978 TOTAL 9047.19 MEAN 24.8 MAX 255 MIN .17 AC-FT 17950

09372000 Mc ELMO CREEK NEAR COLORADO-UTAH STATE LINE--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1977 to September 1978.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, (COLS. PER 100 ML)
NOV										
28...	1430	10	3900	7.7	8.0	29	9.7	--	>120	24
DEC										
27...	1415	11	3900	7.9	3.0	--	11.1	20	120	130
JAN										
30...	1400	11	3500	7.9	5.0	--	10.6	24	K310	100
MAR										
06...	0955	139	2700	7.7	7.0	--	9.8	100	570	>1000
APR										
04...	1200	48	3320	7.4	13.0	--	7.4	52	K57	120
24...	0930	11	3460	7.7	13.0	--	8.8	28	250	270
MAY										
30...	1210	24	2200	7.2	20.0	85	8.0	32	K610	420
JUN										
28...	0950	28	2400	--	19.0	--	8.0	30	K310	K860
AUG										
02...	1050	22	2600	8.0	22.0	--	7.3	69	280	360
30...	1010	5.9	3600	8.1	18.0	--	7.8	44	K610	420
SEP										
27...	0900	43	3400	8.3	15.0	41	8.4	76	620	1400

DATE	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)
NOV										
28...	2000	1700	370	260	360	3.5	7.1	350	0	290
DEC										
27...	2000	1700	370	250	320	3.2	6.3	340	0	280
JAN										
30...	1900	1600	360	250	290	2.9	5.5	350	0	290
MAR										
06...	1400	1100	260	170	170	2.0	8.2	250	0	210
APR										
04...	1800	1600	330	240	250	2.6	6.7	310	0	250
24...	1800	1500	320	240	270	2.8	7.5	310	0	250
MAY										
30...	1200	940	240	140	200	2.5	6.8	290	0	240
JUN										
28...	1100	900	240	130	150	1.9	6.9	270	5	230
AUG										
02...	1200	1000	240	150	160	2.0	5.9	260	0	210
30...	1700	1500	320	230	290	3.0	8.8	360	0	300
SEP										
27...	1600	1400	340	190	190	2.0	8.3	300	0	250

K BASED ON NON-IDEAL COLONY COUNT.

09372000 Mc ELMO CREEK NEAR COLORADO-UTAH STATE LINE--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)
NOV										
28...	2200	69	.5	8.8	1900	3450	2.58	51.3	5.0	.04
DEC										
27...	2000	69	.5	8.8	3600	3190	4.90	107	5.8	.06
JAN										
30...	2100	58	.4	8.0	3500	3240	4.76	104	4.3	.04
MAR										
06...	1400	20	.4	8.7	2340	2160	3.18	878	2.4	.21
APR										
04...	1900	76	.4	10	3170	2970	4.31	412	2.7	.03
24...	2000	64	.4	3.2	3250	3060	4.42	96.5	1.4	.03
MAY										
30...	1200	44	.4	8.2	2060	1980	2.80	133	.63	.01
JUN										
28...	1100	33	.4	11	1940	1810	2.64	147	.42	.03
AUG										
02...	1200	40	.5	5.9	2100	1930	2.86	125	.05	.00
30...	2000	67	.5	9.8	3510	3100	4.77	55.9	.09	.05
SEP										
27...	1700	60	.4	11	2820	2650	3.84	327	1.6	.08

DATE	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C)	PHYTO- PLANK- TON, TOTAL (CELLS PER ML)
NOV										
28...	.64	.68	5.7	.21	.12	310	30	--	--	500
DEC										
27...	1.5	1.6	7.4	.33	.26	270	40	--	--	2600
JAN										
30...	.71	.75	5.1	.28	.13	220	20	8.6	.8	2200
MAR										
06...	.78	.99	3.4	2.4	.06	140	10	11	.6	0
APR										
04...	1.5	1.5	4.2	.19	.09	190	60	16	.7	540
24...	.63	.66	2.1	.06	.01	230	30	12	.7	1300
MAY										
30...	.86	.87	1.5	.07	.05	180	10	11	--	7200
JUN										
28...	.97	1.0	1.4	.16	.04	190	70	9.2	.4	600
AUG										
02...	1.1	1.1	1.2	.12	.00	200	40	7.3	.6	--
30...	.58	.63	.72	.03	.01	290	30	9.7	.4	--
SEP										
27...	2.7	2.8	4.4	.70	.02	230	10	8.4	.6	0

DATE	TIME	SOLIDS, RESIDUE AT 105 DEG. C, DIS- SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS- PENDED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)	ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIUM, DIS- SOLVED (UG/L AS BA)	BARIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS BA)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE)
NOV											
28...	1430	4100	52	20	2	1	--	500	0	--	0
MAR											
06...	0955	--	--	0	--	1	5	--	200	900	--
MAY											
30...	1210	--	--	0	2	2	--	0	0	--	0
AUG											
30...	1010	--	--	8	--	2	4	--	100	60	--
SEP											
27...	0900	--	--	--	4	--	--	100	--	--	0

09372000 Mc ELMO CREEK NEAR COLORADO-UTAH STATE LINE--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	BERYL- LIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CADMIUM DIS- SOLVED (UG/L AS CD)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO)	COBALT, DIS- SOLVED (UG/L AS CO)	COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO)
NOV											
28...	0	--	0	0	--	10	0	--	0	0	--
MAR											
06...	0	10	--	2	1	--	0	20	--	1	4
MAY											
30...	10	--	1	1	--	10	5	--	2	1	--
AUG											
30...	0	1	--	1	1	--	0	2	--	2	12
SEP											
27...	--	--	1	--	--	10	--	--	7	--	--

DATE	COPPER, DIS- SOLVED (UG/L AS CU)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB)	LITHIUM TOTAL RECOV- ERABLE (UG/L AS LI)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)
NOV											
28...	2	--	4	1	--	170	190	160	160	--	.0
MAR											
06...	3	6	--	0	0	--	100	--	50	160	--
MAY											
30...	6	--	6	2	--	90	100	170	70	--	.1
AUG											
30...	3	5	--	1	10	--	160	--	240	560	--
SEP											
27...	--	--	15	--	--	140	--	680	--	--	.0

DATE	MERCURY DIS- SOLVED (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/L AS HG)	MOLYB- DENUM, TOTAL RECOV- ERABLE (UG/L AS MO)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	MOLYB- DENUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)	NICKEL, DIS- SOLVED (UG/L AS NI)	NICKEL, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS NI)	SELE- NIUM, TOTAL (UG/L AS SE)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SELE- NIUM, TOTAL IN BOT- TOM MA- TERIAL (UG/G)
NOV											
28...	.0	--	4	2	--	5	3	--	15	15	--
MAR											
06...	.0	.0	--	4	1	--	3	20	--	7	2
MAY											
30...	.0	--	8	3	--	7	0	--	0	0	--
AUG											
30...	.0	.0	--	12	3	--	3	6	--	4	0
SEP											
27...	--	--	9	--	--	28	--	--	8	--	--

DATE	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS ZN)	GROSS ALPHA, DIS- SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS- SOLVED (PCI/L AS SR/ YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/ YT-90)
NOV										
28...	.0	10	10	--	<66	3.2	14	2.7	13	2.6
MAR										
06...	.0	--	10	16	--	--	--	--	--	--
MAY										
30...	.0	30	20	--	--	--	--	--	--	--
AUG										
30...	.0	--	20	10	--	--	--	--	--	--
SEP										
27...	--	100	--	--	<38	34	15	31	13	30

09372000 Mc ELMO CREEK NEAR COLORADO-UTAH STATE LINE--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
NOV				
28...	1430	10	202	5.5
DEC				
27...	1415	11	144	4.3
JAN				
30...	1400	11	162	4.8
MAR				
06...	0955	139	2700	1010
APR				
24...	0930	11	90	2.7
MAY				
30...	1210	24	194	13
JUN				
28...	0950	28	153	12
AUG				
02...	1050	22	271	16
30...	1010	5.8	8	.13

09372000 Mc ELMO CREEK NEAR COLORADO-UTAH STATE LINE--Continued

PHYTOPLANKTON DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	NOV 28,77	DEC 27,77	JAN 30,78	MAR 6,78
TIME	1430	1415	1400	0955
TOTAL CELLS/ML	500	2600	2200	0
DIVERSITY: DIVISION	0.0	1.0	1.0	0.0
.CLASS	0.0	1.0	1.0	0.0
..ORDER	0.3	1.2	1.0	0.0
...FAMILY	1.5	2.0	1.6	0.0
....GENUS	1.5	2.0	1.7	0.0

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)								
.CHLOROPHYCEAE								
..CHLOROCOCCALES								
...OOCYSTACEAE								
....ANKISTRODESMUS	--	-	--	-	--	-	--	-
....CHLORELLA	--	-	--	-	--	-	--	-
..VOLVOCALES								
...CHLAMYDOMONADACEAE	--	-	--	-	--	-	--	-
CHRYSOPHYTA								
.BACILLARIOPHYCEAE								
..PENNALES								
...NAVICULACEAE								
....ENTOMONEIS	--	-	--	-	--	-	--	-
..CENTRALES								
...BIDDULPHIACEAE								
....BIDDULPHIA	--	-	--	-	--	-	--	-
...COSCINODISCACEAE								
....CYCLOTELLA	22	4	57	2	--	-	--	-
..PENNALES								
...ACHNANTHACEAE								
....RHOICOSPHENIA	--	-	19	1	--	-	--	-
...FRAGILARIACEAE								
....SYNEDRA	--	-	--	-	210	10	--	-
...GOMPHONEMATACEAE								
....GOMPHONEMA	--	-	150	6	--	-	--	-
...NAVICULACEAE								
....NAVICULA	45	9	400#	16	280	13	--	-
....NEIDIUM	--	-	--	-	70	3	--	-
...NITZSCHIACEAE								
....NITZSCHIA	140#	28	--	-	--	-	--	-
...SURIRELLACEAE								
....SURIRELLA	300#	59	1000#	41	350#	16	--	-
.CHRYSOPHYCEAE								
..CHRYSOMONADALES								
...OCHROMONADACEAE								
....OCHROMONAS	--	-	--	-	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)								
.CYANOPHYCEAE								
..HORMOGONALES								
...NOSTOCACEAE	--	-	--	-	--	-	--	-
....ANABAENA	--	-	--	-	--	-	--	-
...OSCILLATORIACEAE								
....OSCILLATORIA	--	-	850#	33	1300#	58	--	-
EUGLENOPHYTA (EUGLENOIDS)								
.EUGLENOPHYCEAE								
..EUGLENALES								
...EUGLENACEAE								
....EUGLENA	--	-	--	-	--	-	--	-
....PHACUS	--	-	--	-	--	-	--	-
....TRACHELOMONAS	--	-	38	1	--	-	--	-
PYRRHOPHYTA (FIRE ALGAE)								
.DINOPHYCEAE	--	-	--	-	--	-	--	-

09372000 Mc ELMO CREEK NEAR COLORADO-UTAH STATE LINE--Continued

PHYTOPLANKTON DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	APR 4,78	APR 24,78	MAY 30,78	JUN 28,78
TIME	1200	0930	1210	0950
TOTAL CELLS/ML	540	1300	7200	600
DIVERSITY: DIVISION	0.0	1.8	0.6	0.6
.CLASS	0.0	1.8	0.6	1.2
..ORDER	0.0	0.0	0.6	1.6
...FAMILY	1.5	0.0	1.5	2.6
....GENUS	1.5	0.0	1.5	2.6

ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHLOROPHYTA (GREEN ALGAE)								
.CHLOROPHYCEAE								
..CHLOROCOCCALES								
...OOCYSTACEAE								
....ANKISTRODESMUS	--	-	--	-	--	-	29	5
....CHLORELLA	--	-	--	-	--	-	14	2
..VOLVOCALES								
...CHLAMYDOMONADACEAE	--	-	240#	19	--	-	--	-
CHRYSOPHYTA								
.BACILLARIOPHYCEAE								
..PENNALES								
...NAVICULACEAE								
....ENTOMONEIS	--	-	20	2	--	-	--	-
..CENTRALES								
...BIDDULPHIACEAE								
....BIDDULPHIA	--	-	--	-	--	-	29	5
...COSCINODISCACEAE								
....CYCLOTELLA	--	-	--	-	--	-	29	5
..PENNALES								
...ACHNANTHACEAE								
....RHOICOSPHENIA	--	-	--	-	--	-	--	-
...FRAGILARIACEAE								
....SYNEDRA	140#	25	--	-	--	-	--	-
...GOMPHONEMATACEAE								
....GOMPHONEMA	140#	25	--	-	--	-	--	-
...NAVICULACEAE								
....NAVICULA	--	-	160	13	900	13	43	7
....NEIDIUM	--	-	--	-	--	-	--	-
...NITZSCHIACEAE								
....NITZSCHIA	--	-	99	8	90	1	220#	36
...SURIRELLACEAE								
....SURIRELLA	270#	50	160	13	45	1	130#	21
.CHRYSOPHYCEAE								
..CHRYSOMONADALES								
...OCHROMONADACEAE								
....OCHROMONAS	--	-	--	-	--	-	86	14
CYANOPHYTA (BLUE-GREEN ALGAE)								
.CYANOPHYCEAE								
..HORMOGONALES								
...NOSTOCACEAE	--	-	500#	40	--	-	--	-
....ANABAENA	--		--	-	2200#	31	--	-
...OSCILLATORIACEAE								
....OSCILLATORIA	--	-	--	-	3900#	54	--	-
EUGLENOPHYTA (EUGLENOIDS)								
.EUGLENOPHYCEAE								
..EUGLENALES								
...EUGLENACEAE								
....EUGLENA	--	-	60	5	--	-	--	-
....PHACUS	--	-	--	-	--	-	29	5
....TRACHELOMONAS	--	-	--	-	--	-	--	-
PYRRHOPHYTA (FIRE ALGAE)								
.DINOPHYCEAE	--	-	20	2	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM. MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

TRANSMOUNTAIN DIVERSIONS FROM COLORADO RIVER BASIN IN COLORADO

There are 24 tunnels or ditches, all of which are equipped with water-stage recorders and Parshall flumes or sharp-crested weirs. Records furnished by Colorado Division of Water Resources. The locations of these diversions are given in the following list.

09010000 Grand River ditch diverts water from tributaries of Colorado River to La Poudre Pass Creek (tributary to Cache la Poudre River) in NW¼ sec.21, T.6 N., R.75 W., in Platte River basin. Two collection ditches beginning at headgates located in sec.28, T.5 N., R.76 W., and sec.29, T.6 N., R.75 W., intercept all tributaries upstream on each side of the Colorado River and converge at La Poudre Pass.
REVISIONS (WATER YEARS).--WSP 1313: 1912-27.

09012000 Eureka ditch diverts water from tributaries of Tonahutu Creek between headgate in sec.7, T.4 N., R.74 W., and Sprague Pass, in Colorado River basin, to Spruce Creek (tributary to Big Thompson River) in sec.16, T.4 N., R.74 W., in Platte River basin.
REVISIONS (WATER YEARS).--WSP 1313: 1949.

09013000 Alva B. Adams tunnel diverts water from Grand Lake and Shadow Mountain Lake in NW¼ sec.9, T.3 N., R.75 W., in Colorado River basin, to Lake Estes (Big Thompson River) in sec.30, T.5 N., R.72 W., in Platte River basin. For daily discharge, see elsewhere in this report.

09021500 Berthoud Pass ditch diverts water from tributaries of Fraser River between headgate in sec.33, T.2 S., R.75 W., and Berthoud Pass, in Colorado River basin, to Hoop Creek (tributary to West Fork Clear Creek) in sec.10, T.3 S., R.75 W., in Platte River basin.

09022500 Moffat water tunnel diverts water from tributaries of Williams Fork (via August P. Gumlick and Vasquez tunnels, beginning in 1959) between headgates (in secs.20 and 29, T.3 S., R.76 W.) and west portal of August P. Gumlick tunnel (in sec.28, T.3 S., R.76 W.) and from the main stem and tributaries of Fraser River between headgates (in sec.8, T.2 S., R.76 W., and sec.24, T.1 S., R.75 W.) and west portal of Moffat tunnel (in sec.11, T.2 S., R.75 W.), in Colorado River basin, to South Boulder Creek, in sec.2, T.2 S., R.74 W., in Platte River basin. (See station 09036000 in Volume 2 for diversions by August P. Gumlick tunnel.)

09042000 Hoosier Pass tunnel diverts water from tributaries of Blue River in Colorado River basin to Montgomery Reservoir (Middle Fork South Platte River) in sec.14, T.8 S., R.78 W., in Platte River basin; this water is again diverted to South Catamount Creek (tributary to Catamount Creek) in SE¼ sec.14, T.13 S., R.69 W., in the Arkansas River basin. Collection conduits extending from the right bank of Crystal Creek (tributary to Spruce Creek) in sec.14, T.7 S., R.78 W., right bank of Spruce Creek in sec.23, T.7 S., R.78 W., right bank of McCullough Gulch in sec.26, T.7 S., R.78 W., right bank of Monte Cristo Creek in SW¼NE¼ sec.2, T.8 S., R.78 W., left bank of Bemrose Creek in SW¼SW¼ sec.6, T.8 S., R.77 W., and intercepting intermediate tributaries, transport diversions to north portal of the tunnel.

09046000 Boreas Pass ditch diverts water from tributaries of Blue River between headgate in sec.26, T.7 S., R.77 W., and Boreas Pass, in Colorado River basin, to Tarryall Creek in sec.26, T.7 S., R.77 W., in Platte River basin.
REVISIONS (WATER YEARS).--WSP 1733: 1958.

09047300 Vidler tunnel diverts water from tributaries of Peru Creek (tributary to Snake River) in sec.9, T.5 S., R.75 W., in Blue River basin, to Leavenworth Creek (tributary to South Clear Creek) in sec.10, T.5 S., R.75 W., in Platte River basin.

09050590 Harold D. Roberts tunnel diverts water from Dillon Reservoir (Blue River) in sec.18, T.5 S., R.77 W., in Blue River basin, to North Fork South Platte River (tributary to South Platte River) in SW¼SW¼ sec.4, T.7 S., R.74 W., in Platte River basin. Figures include a small amount of ground-water inflow between Dillon Reservoir and east portal of tunnel.

09061500 Columbine ditch diverts water from tributaries of Eagle River in sec.5, T.8 S., R.79 W., in Colorado River basin to Chalk Creek (tributary to East Fork Arkansas River) in NW¼ sec.9, T.8 S., R.79 W., in Arkansas River basin.

09062000 Ewing ditch diverts water from Piney Creek in sec.11, T.8 S., R.80 W., in Eagle River basin, to Thayer Gulch (tributary to Tennessee Creek) in sec.11, T.8 S., R.80 W., in Arkansas River basin.

TRANSMOUNTAIN DIVERSIONS FROM COLORADO RIVER BASIN IN COLORADO--Continued

09062500 Wurtz ditch diverts water from tributaries of Eagle River between headgate in sec.32, T.7 S., R.80 W., and Tennessee Pass, in Colorado River basin, to West Tennessee Creek (tributary to Tennessee Creek) in sec.17, T.8 S., R.80 W., in Arkansas River basin.

09063700 Homestake tunnel diverts water from Homestake Lake (Middle Fork Homestake Creek), in sec.17, T.6 S., R.81 W., in Eagle River basin, to Lake Fork in sec.9, T.9 S., R.81 W., in Arkansas River basin. Water is imported to Homestake Lake from tributaries of Homestake Creek by collection conduits that extend from right bank of French Creek in sec.28, T.7 S., R.81 W., and left bank of East Fork Homestake Creek in sec.9, T.8 S., R.81 W., and intercept intermediate tributaries.

09073000 Twin Lakes tunnel diverts water from tributaries of Roaring Fork River between headgates (in sec.21, T.11 S., R.83 W., and sec.2, T.11 S., R.83 W.), and west portal of Twin Lakes tunnel (in sec.24, T.11 S., R.83 W), in Colorado River basin, to North Fork Lake Creek in sec.22, T.11 S., R.82 W., in Arkansas River basin.

09077160 Charles H. Boustead Tunnel diverts water from the main stem and tributaries of Fryingpan River (tributary to Roaring Fork River), in Colorado River basin, to Lake Fork in sec.10, T.9 S., R.81 W., in Arkansas River basin. Water is transported to west portal of tunnel (at lat 39°14'44", long 106°31'47"), by a series of collection conduits extending between headgates on right bank of Sawyer Creek at lat 39°15'58", long 106°38'19", and right bank of Fryingpan River at lat 39°14'40", long 106°31'49", and intercepting intermediate tributaries.

09077500 Busk-Ivanhoe tunnel diverts water from Ivanhoe Lake (Ivanhoe Creek), tributary to Fryingpan River in sec.13, T.9 S., R.82 W., in Roaring Fork River basin, to Busk Creek (tributary to Lake Fork) in sec.20, T.9 S., R.81 W., in Arkansas River basin.

09115000 Larkspur ditch diverts water from tributaries of Tomichi Creek between headgates (in sec.11, T.48 N., R.6 E., and sec.1, T.47 N., R.6 E.), and Marshall Pass, in Gunnison River basin, to Poncha Creek (tributary to South Arkansas River) in SE¼ sec.24, T.48 N., R.6 E., in Arkansas River basin.

09118200 Tarbell ditch diverts water from Lake Fork Cochetopa Creek (tributary to Cochetopa Creek), in NW¼ sec.18, T.43 N., R.2 E., in Gunnison River basin, to Lake Fork Saguache Creek (tributary to Middle Fork Saguache Creek) in NE¼ sec.18, T.43 N., R.2 E., in Rio Grande basin. All records available prior to October 1960 published in WSP 1733.

REVISIONS (WATER YEARS).--WSP 1733: 1949-51.

09121000 Tabor ditch diverts water from tributaries of Cebolla Creek in secs.29 and 36, T.43 N., R.3 W., in Gunnison River basin, to Big Spring Creek (tributary to North Clear Creek) in sec.35, T.43 N., R.3 W., in Rio Grande basin.

09341000 Treasure Pass diversion ditch diverts water from tributaries of Wolf Creek between headgates (in sec.31, T.38 N., R.2 E., and sec.6, T.37 N., R.3 E.), and Wolf Creek Pass, in San Juan River basin, to tributary of South Fork Rio Grande in sec.31, T.38 N., R.2 E., in Rio Grande basin.

09347000 Don La Font ditches 1 and 2 divert water from tributaries of Piedra River between headgates in NW¼ sec.4, T.38 N., R.1 W., and SW¼ sec.33, T.39 N., R.1 W., and Piedra Pass, in San Juan River basin, to South River in sec.4, T.38 N., R.1 W., in Rio Grande basin.

09348000 Williams Creek-Squaw Pass ditch diverts water from Williams Creek (tributary to Piedra River) in sec.13, T.39 N., R.3 W., in San Juan River basin, to Squaw Creek in sec.10, T.39 N., R.3 W., in Rio Grande basin.

09351000 Pine River-Weminuche Pass ditch diverts water from North Fork Los Pinos River (tributary to Los Pinos River) in sec.4, T.39 N., R.4 W., in San Juan River basin, to Weminuche Creek in sec.33, T.40 N., R.4 W., in Rio Grande basin.

09351500 Weminuche Pass ditch diverts water from left bank of Rincon la Vaca Creek (tributary to Los Pinos River) in sec.5, T.39 N., R.4 W., in San Juan River basin, to Weminuche Creek in sec.33, T.40 N., R.4 W., in Rio Grande basin.

TRANSMOUNTAIN DIVERSIONS FROM COLORADO RIVER BASIN IN COLORADO

DIVERSIONS, IN ACRE-FEET, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

	Diversion	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Water year
	TO PLATTE RIVER BASIN													
09010000	Grand River ditch...	33	0	0	0	0	0	56	454	10,300	11,040	2,680	670	25,230
09012000	Eureka ditch........	0	0	0	0	0	0	0	0	27	15	0	0	42
09013000	Alva B. Adams tunnel	19,480	18,430	28,240	28,210	27,930	30,970	19,160	15,970	6,730	12,530	30,120	25,910	263,700
09021500	Berthoud Pass ditch.	0	0	0	0	0	0	0	0	36	438	151	52	677
09022500	Moffat water tunnel.	2,080	1,330	1,030	813	609	626	1,380	10,630	38,150	16,290	6,160	2,480	81,590
09046000	Boreas Pass ditch...	0	0	0	0	0	0	0	0	66	100	9.0	0	174
09047300	Vidler tunnel.......	0	0	0	0	0	0	0	0	0	134	91	30	256
09050590	Harold D. Roberts tunnel...........	16,120	6,170	6,440	6,660	6,000	6,360	6,810	7,760	8,720	23,830	24,850	14,040	133,800
	Total......................	37,710	25,930	35,710	35,680	34,540	37,960	27,410	34,810	64,030	64,380	64,060	43,180	505,400
	TO ARKANSAS RIVER BASIN													
09042000	Hoosier Pass tunnel.	0	0	0	0	0	0	45	677	4,800	1,170	1,260	1,800	9,750
09061500	Columbine ditch.....	0	0	0	0	0	0	0	67	1,500	381	43	0	1,990
09062000	Ewing ditch.........	0	0	0	0	0	0	0	179	781	232	72	0	1,280
09062500	Wurtz ditch.........	0	0	0	0	0	0	0	496	2,680	593	68	0	3,840
09063700	Homestake tunnel....	0	0	0	0	0	0	0	0	0	0	0	0	0
09073000	Twin Lakes tunnel...	222	264	65	154	115	228	330	4,140	30,110	13,640	1,840	653	51,770
09077160	Charles H. Boustead Tunnel............	0	0	0	0	0	0	58	4,890	30,310	13,710	996	0	49,960
09077500	Busk-Ivanhoe tunnel.	88	0	0	0	0	0	0	352	4,680	2,160	162	29	7,470
09115000	Larkspur ditch......	0	0	0	0	0	0	0	0	35	12	7.9		54
	Total......................	310	264	65	154	115	228	433	10,800	74,900	31,900	4,450	2,480	126,100
	TO RIO GRANDE BASIN													
09118200	Tarbell ditch.......	5.9	0	0	0	0	0	0	28	296	135	38	0	503
09121000	Tabor ditch.........	0	0	0	0	0	0	0	94	451	132	43	0	719
09341000	Treasure Pass diversion ditch.........	0	0	0	0	0	0	0	17	248	39	0	0	304
09347000	Don La Font ditches Nos. 1 and 2......	0	0	0	0	0	0	0	0	80	12	0	0	92
09348000	Williams Creek-Squaw Pass ditch........	0	0	0	0	0	0	0	0	0	0	0	0	0
09351000	Pine River-Weminuche Pass ditch........	0	0	0	0	0	0	0	0	49	14	0	0	63
09351500	Weminuche Pass ditch	0	0	0	0	0	0	0	0	1,270	284	20	0	1,570
	Total......................	6	0	0	0	0	0	0	139	2,390	616	101	0	3,250
	Grand Total................	38,030	26,190	35,780	35,830	34,660	38,190	27,840	45,750	141,320	96,900	68,610	45,660	634,760

NOTE: Due to method of computing water year figures and rounding procedures, totals do not agree.

CREST-STAGE PARTIAL-RECORD STATIONS

The following table contains annual maximum discharges for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained, but is not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS DURING WATER YEAR 1977

Station number	Station name	Location	Drainage area (mi²)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (ft³/s)
		DOLORES RIVER BASIN					
09168700	Disappointment Creek tributary near Slick Rock, CO	Lat 38¼01'33", long 108¼48'51", in SW¼SW¼ sec.36, T.43 N., R.18 W., San Miguel County, at twin culverts at State Highway 141, 5 mi (8 km) southeast of Slick Rock.	1.93	1970-78	1978	(a)	<36
09169800	East Paradox Creek tributary near Bedrock, CO	Lat 38¼16'53", long 108¼48'21", in NE¼SW¼ sec.36, T.47 N., R.18 W., Montrose County, at culvert at State Highway 90, 5.5 mi (8.8 km) southeast of Bedrock.	3.96	1970-78	1978	(a)	<27
09175800	Dead Horse Creek near Naturita, CO	Lat 38¼02'37", long 108¼34'38", in NE¼SE¼ sec.25, T.44 N., R.16 W., San Miguel County, at culvert at State Highway 141, 12.1 mi (19.5 km) south of Naturita.	5.33	1970-78	7-17-78	11.33	38
09179400	West Creek tributary near Gateway, CO	Lat 38¼43'01", long 108¼55'28", in NW¼SE¼ sec.29, T.15 S., R.103 W., Mesa County, on box culvert at State Highway 141, 3 mi (5 km) northeast of Gateway.	2.17	1973-78	1978	(a)	<19
		GREEN RIVER BASIN					
09250900	Lay Creek tributary near Lay, CO	Lat 40°31'31", long 107°55'28", in NE¼SE¼ sec.27, T.7 N., R.94 W., Moffat County, on left bank at culvert under U.S. Highway 40, 0.2 mi (0.3 km) upstream from mouth, 2.5 mi (4.0 km) west of Lay, and 22 mi (35 km) west of Craig.	61.0	1977-78	1978	(a)	< .2
09259750	Little Snake River tributary near Great Divide, CO	Lat 40°53'10", long 108°08"47", in SE¼NE¼ sec.30, T.11 N., R.95 W., Moffat County, on right bank at culvert on county road 21, 1.2 mi (1.9 km) upstream from mouth, and 15 mi (24 km) northwest of Great Divide.	3.5	1974-78	1978	(a)	<3.7
09306315	Gillam Draw near Rangely, CO	Lat 40°05'31", long 108°44'45", in NE¼NE¼ sec.5, T.1 N., R.101 W., Rio Grande County, on right bank 20 ft (6 m) downstream from bridge on State Highway 64, 0.8 mi (1.3 km) upstream from mouth, and 3.0 mi (4.8 km) east of Rangely.	13.6	1974-78	8-13-78	c12.89	282
09306400	West Twin Wash near Dinosaur, CO	Lat 40°14'34", long 108°57'16", in NE¼SE¼ sec.9, T.3 N., R.103 W., Moffat County, on left bank at culvert on U.S. Highway 40, 1.5 mi (2.4 km) upstream from mouth, and 2.9 mi (4.7 km) east of Dinosaur.	4.12	1974-78	9- 7-78	13.02	188

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS DURING WATER YEAR 1977--Continued

					Annual maximum		
Station number	Station name	Location	Drainage area (mi²)	Period of record	Date	Gage height (feet)	Dis-charge (ft³/s)
		SAN JUAN RIVER BASIN					
09371300	McElmo Creek tributary near Cortez, CO	Lat 37°20'51", long 108°28'56", in NE¼SE¼ sec.27, T.36 N., R.15 W., Montezuma County, at bridge on U.S. Highway 160, 5.8 mi (9.3 km) east of Cortez.	4.43	1971-78	6-29-78	10.08	11

a Peak stage did not reach bottom of gage.
b Approximately.
c From floodmarks.

SPECIFIC CONDUCTANCE AND TEMPERATURE DATA AT SELECTED SITES

09165000 - DOLORES RIVER BELOW RICO, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	TEMPER-ATURE (DEG C)
OCT		
11...	400	5.0
NOV		
02...	525	1.0
DEC		
05...	560	1.0
JAN		
03...	600	.0
04...	600	.0
FEB		
06...	600	.0
27...	680	.0
APR		
10...	400	3.0
MAY		
01...	230	4.0
22...	180	9.0
JUN		
05...	110	5.0
JUL		
10...	210	10.0
AUG		
14...	400	12.5

09166500 - DOLORES RIVER AT DOLORES, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	TEMPER-ATURE (DEG C)
OCT		
11...	350	5.0
NOV		
02...	470	4.5
DEC		
05...	500	.0
JAN		
03...	600	.0
04...	650	.0
FEB		
06...	430	.0
27...	500	.0
APR		
10...	300	3.0
MAY		
01...	260	7.0
23...	170	4.0
JUN		
05...	150	7.0
JUL		
10...	210	14.0
AUG		
14...	310	15.0

09168100 - DISAPPOINTMENT CREEK NEAR DOVE CREEK, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	TEMPER-ATURE (DEG C)
OCT		
12...	2900	12.0
NOV		
02...	3100	.0
DEC		
06...	3500	.0
JAN		
04...	3500	.0
FEB		
06...	3500	3.5
28...	2800	3.0
APR		
11...	1380	6.0
MAY		
03...	1000	10.0
25...	280	10.0
JUN		
07...	490	10.0
JUL		
12...	1700	20.0

09169500 - DOLORES RIVER AT BEDROCK, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)	DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
OCT			APR		
12...	2200	7.0	12...	320	11.0
NOV			MAY		
01...	1300	4.0	02...	270	9.0
DEC			24...	300	12.0
06...	1410	1.0	JUN		
JAN			06...	300	10.0
04...	1450	.0	JUL		
FEB			11...	1150	20.0
07...	1300	3.0			
28...	1020	8.0			

09171100 - DOLORES RIVER NEAR BEDROCK, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)	DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
OCT			APR		
12...	7600	10.0	12...	340	11.0
NOV			MAY		
01...	22000	6.5	02...	330	11.0
DEC			24...	--	13.0
06...	29000	1.0	JUN		
JAN			06...	280	13.0
04...	6000	3.0	JUL		
04...	6800	1.0	11...	8400	20.0
FEB			AUG		
07...	9000	3.0	15...	88000	17.5
28...	9000	8.0			

09172500 - SAN MIGUEL RIVER NEAR PLACERVILLE, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)	DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
OCT			APR		
11...	435	10.0	10...	360	8.0
31...	440	4.0	MAY		
DEC			01...	360	8.0
05...	480	2.5	23...	290	6.0
JAN			JUN		
04...	375	.0	08...	210	5.0
05...	400	.0	JUL		
FEB			11...	230	13.0
06...	470	1.0	AUG		
27...	400	3.0	14...	390	16.0

09172600 - SALTADO CREEK NEAR NORWOOD, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	TEMPER-ATURE (DEG C)	DATE	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	TEMPER-ATURE (DEG C)
APR			JUL		
19...	70	4.0	10...	190	16.0
MAY			AUG		
23...	--	6.0	14...	230	16.0
JUN					
05...	160	9.0			

09172700 - GURLEY DITCH NEAR NORWOOD, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	TEMPER-ATURE (DEG C)	DATE	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	TEMPER-ATURE (DEG C)
OCT			JUN		
11...	200	12.0	06...	110	11.0
APR			JUL		
11...	280	15.0	10...	130	19.0
MAY			AUG		
03...	110	9.0	15...	--	20.0
24...	120	4.0			

09172800 - WEST BEAVER CREEK NEAR NORWOOD, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	TEMPER-ATURE (DEG C)	DATE	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	TEMPER-ATURE (DEG C)
JUN			AUG		
05...	55	5.0	16...	110	11.0
JUL					
10...	80	11.0			

09174700 - WEST NATURITA C AT UPPER STA, NEAR NORWOOD, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)	DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
APR			JUL		
10...	270	7.0	12...	180	16.0
MAY			AUG		
01...	120	6.0	16...	180	17.0
25...	80	6.0			
JUN					
07...	90	9.0			

09175200 - LILYLANDS CANAL NEAR NORWOOD, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)	DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
MAY			JUL		
03...	370	10.0	12...	220	24.0
25...	265	13.0	AUG		
JUN			15...	--	24.0
07...	200	15.0			

09175400 - MAVERICK DRAW NEAR NORWOOD, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)	DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
OCT			APR		
13...	1800	6.0	11...	1800	16.0
31...	1750	4.0	MAY		
DEC			03...	1900	13.0
05...	1750	4.0	25...	1800	19.0
JAN			JUN		
04...	1700	1.0	07...	1490	19.0
FEB			JUL		
08...	1700	3.0	12...	1400	22.0
MAR			AUG		
01...	1700	5.0	15...	--	17.0

09175900 - DRY CREEK NEAR NATURITA, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)	DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
OCT			APR		
13...	4000	5.0	11...	5000	4.0
NOV			MAY		
01...	5000	--	03...	1300	9.0
DEC			25...	1150	8.0
06...	7000	1.0	JUN		
FEB			07...	4900	12.0
28...	5500	3.0			

09236000 - BEAR RIVER NEAR TOPONAS, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	TEMPER-ATURE (DEG C)	DATE	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	TEMPER-ATURE (DEG C)
OCT 19...	--	3.5	NOV 17...	120	4.0

09239500 - YAMPA RIVER AT STEAMBOAT SPRINGS, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	TEMPER-ATURE (DEG C)	DATE	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	TEMPER-ATURE (DEG C)
NOV 18...	300	1.0	MAR 23...	300	.5
DEC 22...	350	.5	MAY 24...	90	9.5
JAN 24...	320	.5	JUL 24...	140	15.0
FEB 23...	220	.5			

09241000 - ELK RIVER AT CLARK, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	TEMPER-ATURE (DEG C)	DATE	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	TEMPER-ATURE (DEG C)
OCT 20...	--	7.5	APR 24...	150	4.0
NOV 18...	100	1.0	AUG 03...	<50	10.5

09245000 - ELKHEAD CREEK NEAR ELKHEAD, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	TEMPER-ATURE (DEG C)	DATE	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	TEMPER-ATURE (DEG C)
OCT 06...	290	10.0	NOV 28...	250	1.0

09249200 - SOUTH FORK OF WILLIAMS FORK NEAR PAGODA, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)	DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
OCT			APR		
06...	340	11.5	20...	200	7.5
NOV			JUL		
28...	320	1.0	12...	200	15.0
MAR			AUG		
01...	160	1.0	04...	320	12.0

09250000 - MILK CREEK NEAR THORNBURGH, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)	DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
OCT			JUN		
06...	1100	16.0	14...	340	12.5
NOV			JUL		
30...	825	1.5	12...	850	24.0
JAN			AUG		
03...	160	.5	04...	1050	22.0
MAY					
25...	250	7.5			

09255000 - SLATER FORK NEAR SLATER, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)	DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
OCT			DEC		
03...	240	10.0	13...	220	1.0
14...	230	7.0	MAR		
NOV			22...	305	5.0
02...	220	4.0			

09258000 - WILLOW CREEK NEAR DIXON, WY.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)	DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
OCT			JUL		
03...	300	7.5	10...	50	12.0
NOV					
02...	210	7.0			

09302450 - LOST CREEK NEAR BUFORD, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)	DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
OCT 19...	460	5.0	APR 19...	280	4.0
NOV 22...	410	.0	MAY 25...	153	8.0
DEC 29...	395	.0	JUL 12...	255	19.0
JAN 25...	325	.0	AUG 22...	400	15.0
FEB 02...	384	.0	SEP 27...	440	9.0
MAR 14...	318	.0			

09302500 - MARVINE CREEK NEAR BUFORD, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)	DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
NOV 09...	360	.0	APR 17...	328	4.0
DEC 07...	335	2.5	MAY 24...	244	8.5
JAN 05...	345	2.0	JUL 12...	221	11.0
FEB 02...	320	1.0	AUG 23...	265	13.5
MAR 13...	330	5.0	SEP 27...	282	6.0

09303300 - SOUTH FORK WHITE RIVER AT BUDGES RESORT, CC

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)	DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
OCT 07...	140	7.5	AUG 08...	160	13.5
JUN 27...	100	--			

09303320 - WAGONWHEEL CREEK AT BUDGES RESORT, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
AUG 08...	290	12.0

SPECIFIC CONDUCTANCE AND TEMPERATURE DATA AT SELECTED SITES

09303400 - SOUTH FORK WHITE RIVER NEAR BUDGES RESORT, C

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)	DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
OCT			MAY		
07...	220	6.0	26...	1140	5.5
NOV			JUL		
11...	220	.0	13...	188	11.5
MAR			AUG		
09...	207	2.0	24...	210	12.0
APR					
18...	205	7.5			

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY

09303500 - SOUTH FORK WHITE RIVER NEAR BUFORD, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)	DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
OCT			APR		
07...	210	8.0	18...	240	1.0
NOV			MAY		
11...	240	1.0	26...	230	3.5
DEC			JUL		
06...	215	.0	13...	210	9.0
JAN			AUG		
06...	198	1.0	24...	255	10.0
MAR			SEP		
09...	233	4.0	27...	240	10.5

09304150 - MILLER CREEK NEAR MEEKER, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)	DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
OCT			MAY		
14...	1010	10.0	04...	990	12.0
NOV			JUN		
21...	1040	4.5	09...	740	10.0
DEC			JUL		
29...	1015	5.0	14...	970	9.0
JAN			AUG		
24...	1095	4.0	22...	1005	11.0
MAR			SEP		
03...	1010	1.0	25...	975	15.0
APR					
04...	1050	13.0			

SPECIFIC CONDUCTANCE AND TEMPERATURE DATA AT SELECTED SITES

09304500 - WHITE RIVER NEAR MEEKER, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
OCT		
28...	870	5.0
NOV		
28...	610	2.0
DEC		
27...	670	.0
JAN		
25...	760	2.0
FEB		
27...	705	3.0
MAR		
29...	740	12.0
MAY		
23...	285	8.0
JUN		
12...	260	10.0
JUL		
19...	455	15.0
AUG		
21...	620	13.0
SEP		
25...	660	9.0

09306380 - DOUGLAS CREEK AT RANGELY, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
OCT		
07...	850	12.0
07...	850	12.0
MAR		
02...	1525	2.0
APR		
06...	1850	14.0
24...	1390	11.0
MAY		
09...	940	16.5
16...	940	19.5
19...	620	13.0
JUN		
29...	1520	29.0

09339900 - EF SAN JUAN R AB SAND CREEK, NR PAGOSA SPGS, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
OCT		
11...	130	5.0
NOV		
01...	160	4.0
DEC		
01...	160	1.0
MAR		
09...	170	1.0
MAY		
09...	130	9.0
MAY		
25...	95	11.0
JUN		
08...	100	8.0
JUL		
06...	100	15.0
AUG		
14...	95	10.0

09340000 - EAST FORK SAN JUAN RIVER NR PAGOSA SPRINGS, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)	DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
OCT			MAY		
11...	110	6.0	09...	110	9.0
NOV			25...	110	11.0
01...	120	5.0	JUN		
DEC			08...	110	9.0
01...	140	.5	12...	100	9.0
29...	140	1.0	JUL		
MAR			06...	100	15.0
09...	130	1.0	AUG		
APR			14...	100	10.0
05...	110	5.0			

09344000 - NAVAJO R AT BANDED PEAK RANCH, NEAR CHROMO, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)	DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
APR			AUG		
19...	--	10.0	15...	--	14.5
MAY			31...	--	16.0
17...	--	9.5	SEP		
JUN			20...	--	9.5
01...	--	13.0			
JUL					
27...	--	19.5			

09342500 - SAN JUAN RIVER AT PAGOSA SPRINGS, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)	DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
OCT			MAY		
12...	210	11.0	09...	130	11.0
NOV			26...	80	6.0
02...	220	5.0	JUN		
DEC			09...	75	10.0
01...	140	4.0	12...	--	9.0
29...	140	2.5	20...	80	10.0
FEB			JUL		
02...	180	1.0	07...	110	11.0
MAR			AUG		
08...	190	5.0	15...	110	13.0
APR					
06...	120	3.0			

SPECIFIC CONDUCTANCE AND TEMPERATURE DATA AT SELECTED SITES

09346000 - NAVAJO RIVER AT EDITH, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
OCT		
11...	340	4.0
NOV		
02...	220	.0
DEC		
02...	265	.0
29...	240	1.0
FEB		
02...	250	.0
MAR		
08...	140	9.0

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
APR		
05...	260	9.0
MAY		
10...	210	11.0
26...	160	8.0
JUN		
09...	--	7.0
JUL		
07...	230	18.0
AUG		
14...	240	12.0

09347205 - MIDDLE FORK PIEDRA RIVER NEAR DYKE, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
OCT		
11...	70	8.0
NOV		
02...	75	1.0
DEC		
02...	80	1.0
30...	80	1.0
MAR		
09...	80	1.0
MAY		
10...	80	3.0

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
MAY		
26...	70	10.0
JUN		
09...	70	6.0
12...	50	4.0
20...	70	6.0
JUL		
07...	50	6.0
AUG		
14...	70	7.0

09361000 - HERMOSA CREEK NEAR HERMOSA, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
OCT		
27...	700	7.0
NOV		
30...	750	1.0
JAN		
06...	750	1.0
FEB		
01...	750	.0
MAR		
03...	650	3.0
APR		
05...	310	7.0

DATE	SPECIFIC CONDUCTANCE (MICHOMHOS)	TEMPERATURE (DEG C)
APR		
26...	280	4.0
JUN		
02...	200	4.0
JUL		
13...	470	12.0
AUG		
24...	600	12.0
SEP		
25...	825	15.0

09361500 - ANIMAS RIVER AT DURANGO, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	TEMPER-ATURE (DEG C)
OCT		
19...	640	11.0
NOV		
23...	680	1.0
DEC		
20...	470	.0
JAN		
24...	670	1.0
FEB		
21...	620	4.5
MAR		
17...	470	5.0
APR		
21...	315	7.0
JUN		
02...	180	5.0
11...	200	9.0
JUL		
24...	380	15.0
AUG		
24...	590	18.0
SEP		
22...	900	12.5

09363050 - FLORIDA R BL FLOR FARMERS DITCH, NR DURANGO, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	TEMPER-ATURE (DEG C)
OCT		
27...	325	5.0
NOV		
30...	290	1.0
DEC		
28...	280	1.0
FEB		
01...	260	2.0
MAR		
03...	280	4.0
APR		
05...	280	10.0
APR		
26...	280	12.0
JUN		
01...	250	9.0
29...	190	11.0
JUL		
31...	170	15.5
AUG		
28...	185	15.0
SEP		
25...	320	16.0

09363100 - SALT CREEK NEAR OXFORD, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	TEMPER-ATURE (DEG C)
OCT		
27...	400	5.0
NOV		
30...	700	1.0
DEC		
28...	1800	.5
FEB		
01...	1090	1.0
MAR		
03...	1250	1.0
20...	300	--
21...	320	5.0
APR		
05...	840	11.0
26...	1300	17.0
JUN		
01...	300	13.0
29...	210	16.0
JUL		
31...	210	21.5
AUG		
28...	180	13.5
SEP		
25...	200	14.0

09363200 - FLORIDA RIVER AT BONDAD, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
OCT		
27...	570	4.0
NOV		
30...	580	.0
DEC		
28...	570	1.0
FEB		
01...	560	2.0
MAR		
03...	530	4.0
21...	280	6.0
APR		
05...	380	10.0
APR		
26...	450	13.0
JUN		
01...	540	13.0
29...	410	18.0
JUL		
31...	330	21.0
AUG		
28...	380	13.0
SEP		
25...	420	13.0

09371000 - MANCOS RIVER NEAR TOWAOC, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
OCT		
31...	3000	3.0
NOV		
28...	3100	1.5
DEC		
27...	3400	1.0
JAN		
30...	2200	1.0
MAR		
06...	2200	9.0
28...	1500	9.0
APR		
25...	540	13.0
MAY		
22...	430	13.0
JUN		
13...	560	17.0
28...	2000	21.0
SEP		
27...	1500	18.0

09371400 - HARTMAN DRAW AT CORTEZ, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
MAR		
30...	3000	12.5
APR		
24...	3000	16.0
MAY		
11...	2700	14.0
22...	2000	17.0
JUN		
08...	1840	18.0
28...	1780	19.0
JUL		
13...	2000	17.0
AUG		
02...	2000	17.5
17...	2180	19.0
30...	2100	18.0
SEP		
27...	3000	17.0

09371420 - MCELMO CREEK ABOVE ALKALI CANYON, NR CORTEZ, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
OCT 18...	3000	8.0
NOV 28...	4000	3.0
JAN 18...	3200	1.0
MAR 14...	3200	4.0
APR 17...	3800	10.0
MAY 11...	3600	18.0
JUN 13...	2500	20.0
AUG 02...	3000	20.0
SEP 13...	3400	16.0

09371495 - MUD CREEK NEAR CORTEZ, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
MAR 30...	9000	--
APR 24...	6000	15.0
MAY 22...	3600	15.0
JUN 28...	2600	20.0
JUL 14...	2500	19.0
AUG 02...	2400	19.0
30...	3000	15.0
SEP 27...	2700	20.0

09371700 - MCELMO CREEK BELOW CORTEZ, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
OCT 31...	3100	8.0
NOV 28...	4000	3.0
DEC 27...	4000	1.0
JAN 30...	3400	5.0
MAR 06...	2800	7.0
APR 04...	2100	10.0
APR 24...	3400	16.0
MAY 22...	2200	17.0
JUN 28...	2200	20.0
AUG 02...	2200	22.0
30...	3000	15.0
SEP 27...	2400	18.0

LA PLATA COUNTY

370122107522701

NB 32- 9-18BBB. B. Cogburn. Drilled stock water-table well in Naciemento Formation. Diameter, 6 in (0.2 m). Depth, 138 ft (42.1 m). MP, 0.3 ft (0.1 m) above lsd. Altitude of land surface, 5,980 ft (1,822.7 m). Records available: 1973-76.

Highest water level, 20.3 ft (6.2 m) below lsd, Aug. 26, 1976; lowest water level, 27.3 ft (8.3 m) below lsd, Apr. 30, 1974.

Aug. 12, 1977   20.36 ft

MOFFAT COUNTY

403040107420801

SB 7-92-34DBD. J. Herod. Drilled domestic water-table well in Browns Park Formation. Diameter, 5 in (0.1 m). Depth, 190 ft (57.9 m). MP, 4.0 ft (1.2 m) below lsd. Altitude of land surface, 6,545 ft (1,994.9 m). Records available: 1974-76.

Highest water level, 70.3 ft (21.4 m) below lsd, Feb. 2, 1976; lowest water level, 72.9 ft (22.2 m) below lsd, Nov. 7, 1974.

Nov. 1, 1977   70.31 ft

MONTEZUMA COUNTY

370414108583901

NB33-20-25CDC. Ute Indian Tribe. Drilled stock water-table well in Dakota Sandstone. Diameter, 5 in (0.1 m). Depth, 250 ft (76.2 m). MP, 2.0 ft (0.6 m) above lsd. Altitude of land surface, 4,900 ft (1,493.5 m). Records available: 1973-76.

Highest water level, 53.3 ft (16.2 m) below lsd, Sept. 30, 1975; lowest water level, 50.9 ft (15.5 m) below lsd, Aug. 30, 1976.

Aug. 26, 1977   51.74 ft

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October 1, 1978

FACTORS FOR CONVERTING INCH-POUND UNITS TO INTERNATIONAL SYSTEM UNITS (SI)

The following factors may be used to convert the inch-pound units published herein to the International System of Units (SI). This report contains both the inch-pound and SI unit equivalents in the station manuscript descriptions.

Multiply inch-pound units	By	To obtain SI units
	Length	
inches (in)	$2.54x10^{1}$	millimeters (mm)
	$2.54x10^{-2}$	meters (m)
feet (ft)	$3.048x10^{-1}$	meters (m)
miles (mi)	$1.609x10^{0}$	kilometers (km)
	Area	
acres	$4.047x10^{3}$	square meters (m^2)
	$4.047x10^{-1}$	square hectometers (hm^2)
	$4.047x10^{-3}$	square kilometers (km^2)
square miles (mi^2)	$2.590x10^{0}$	square kilometers (km^2)
	Volume	
gallons (gal)	$3.785x10^{0}$	liters (L)
	$3.785x10^{0}$	cubic decimeters (dm^3)
	$3.785x10^{-3}$	cubic meters (m^3)
million gallons	$3.785x10^{3}$	cubic meters (m^3)
	$3.785x10^{-3}$	cubic hectometers (hm^3)
cubic feet (ft^3)	$2.832x10^{1}$	cubic decimeters (dm^3)
	$2.832x10^{-2}$	cubic meters (m^3)
cfs-days	$2.447x10^{3}$	cubic meters (m^3)
	$2.447x10^{-3}$	cubic hectometers (hm^3)
acre-feet (acre-ft)	$1.233x10^{3}$	cubic meters (m^3)
	$1.233x10^{-3}$	cubic hectometers (hm^3)
	$1.233x10^{-6}$	cubic kilometers (km^3)
	Flow	
cubic feet per second (ft^3/s)	$2.832x10^{1}$	liters per second (L/s)
	$2.832x10^{1}$	cubic decimeters per second (dm^3/s)
	$2.832x10^{-2}$	cubic meters per second (m^3/s)
gallons per minute (gal/min)	$6.309x10^{-2}$	liters per second (L/s)
	$6.309x10^{-2}$	cubic decimeters per second (dm^3/s)
	$6.309x10^{-5}$	cubic meters per second (m^3/s)
million gallons per day	$4.381x10^{1}$	cubic decimeters per second (dm^3/s)
	$4.381x10^{-2}$	cubic meters per second (m^3/s)
	Mass	
tons (short)	$9.072x10^{-1}$	megagrams (Mg) or metric tons